THIS BOOK IS WITH TEARED PAGES

Keep Your Card in This Pocket

Books will be issued only on presentation of proper library cards.

Unless labeled otherwise, books may be retained for four weeks. Borrowers finding books marked, defaced or mutilated are expected to report same at library desk; otherwise the last borrower will be held responsible for all imperfections discovered.

The card holder is responsible for all books drawn

on this card.

Penalty for over-due books 2c a day plus cost of notices.

Lost cards and change of residence must be reported promptly.



Public Library Kansas City, Mo.

Keep Your Card in This Pocket



19 19%	mayor audites adversariamentalisation and the highly the
UN 12 40	DEC 2 5 1995 (D)
.13 '40	
30'40 13	
read of the	
23 47 2/	
6 44 28	
747 16	Name and American
24 76	- materials - mate
4'48//	The state of the s
	where the same of
JAN 0 2 1992	A THE REAL PROPERTY OF THE PRO
Land of the state	A Commence of the Control of the Con

EARLY LIFE & LETTERS OF LUTHER BURBANK

BY HIS SISTER

EMMA BURBANK BEESON

Author of "A Nature Book the Pilgrims Left," "The Town of Many Shrines," and Coauthor of "Stories of Luther Burbank and His Plant School."

WITH INTRODUCTION BY DAVID STARR JORDAN



HARR WAGNER PUBLISHING COMPANY
SAN FRANCISCO, CALIFORNIA

Copyright, 1927, by Emma Burbank Beeson

Williams Printing Company San Francisco, California DEDICATED TO
THE MEMORY OF
THE MOTHER
WHOSE DREAMS
WERE REALIZED
IN THE LIFE OF HER SON

BIOGRAPHICAL NOTE

LUTHER BURBANK, naturalist and originator of new plants, fruits, and flowers, was born at Lancaster, Mass., March 7, 1849, of an ancestry English and Scotch, with a slight mixture of French, Dutch, and Welsh—the son of a farmer and reared in a typical New England home, educated in the district school and in the Lancaster Academy.

In 1875 he settled in Santa Rosa, Cal. There he established a very successful nursery business, and later extensive experimental grounds, where over a million plants were raised each year for testing.

By the wonderful development of new forms of plant life, through cross-breeding and selection, world-wide reputation was gained.

Tuft's College, Mass., conferred on him the degree of Doctor of Science in 1905. He was special lecturer at Leland Stanford University; fellow of the American Association for the Advancement of Science; member of the American Pomological Society; honorary member American Breeders' Association; honorary member California Academy of Sciences; also of California State Floral Society, Pacific Coast Nurserymen's Association, California State Board of Trade, and many other clubs and societies.

Among his achievements were origination of the Burbank potato, numerous rapid-growing edible thornless opuntias (cactus) calculated to give nourishment to men and animals in desert countries; the Santa Rosa, Climax,

Wickson, Apple, Gold, and other plums; a new fruithe Plumcot; the Giant, Sugar, and Stoneless prunes the Burbank cherry; the Burbank, Santa Rosa, and Peachblow roses; Shasta daisies, Giant and Fragrance callas, and many other new flowers, fruits, vegetables grasses, ferns, trees, and nuts. In the number of fruit and flowers improved, his work is without a rival.

An intuitive genius, a special gift of judgment, untir ing patience, and perseverance are some of the character istics which made Burbank's success.

In 1905 the Carnegie Institution granted him an an nual appropriation of \$10,000 for ten years, to ensure the undisturbed continuation of his work, and particularly to add to the facilities for the scientific recording of facts however, as this arrangement proved to be a burden to him financially and otherwise, at the expiration of five years it was terminated, and he continued his work untrammeled.

He died at his home in Santa Rosa, April 11, 1926, after a brief illness, leaving many valuable experiments ur finished. He was laid to rest under a favorite tree in his gardens at Santa Rosa, honored and mourned, not b California alone, but by the world.

Burbank was twice married, but left no children During his later years considerable time was devoted ilterary work. Among his best-known works are: "TI Training of the Human Plant"; "Luther Burbank, H Methods and Discoveries," in twelve volumes; "Ho Plants Are Trained to Work for Man," in eight volume as well as essays and magazine articles.

INTRODUCTION

This volume is concerned with the intimate life of one of the leaders in American science. It does not dwell on Burbank's achievements in plant breeding, his wide acquaintance with Darwin's discoveries and theories, the high respect in which he was held by his scientific associates, nor yet does it stress his skill in adapting the knowledge of evolution and the facts of Darwinism to human needs, through improvement in value and in beauty of plant life. It is not even concerned primarily with Burbank's religious views, sane and devout, nor with his rejection of man-made dogma and the ecclesiasticism so often parasitic upon it.

Others have written fully and accurately of his public services and his standing in science, and Burbank himself has told in detail the record of his methods and his uccesses. It is left for his sister to show the inner life of the man, his heredity, his youth, and his developing bersonality.

Among the men of science of our time Burbank held in honored place, not as a "wizard," nor alone as a clever operator, but as a man of broad views, exact knowledge, and a high-minded and ennobling character.

DAVID STARR JORDAN.

STANFORD, November 20, 1926.

THE PUBLISHER'S FOREWORD

"We are now standing upon the threshold of new methods and new discoveries which shall give us imperial domain."

-Luther Burbank.

ф

It is not the design of the author to tell in this volume of the achievements of Luther Burbank. Beautiful flowers in every garden tell that he has passed this way; luscious fruits on orchard trees speak of his work; even the neglected weed by the wayside has felt his kindly touch and blossomed into beauty.

Others will take up the work he began and carry it forward. It is for the inspiration of those who will follow in his footsteps that this work has been undertaken; that they may know of his early life, his self-denial and struggle as well as of the joy he found in every step of the way—learning first hand the lessons Nature teaches.

Of his early life no one is better prepared to write than his sister—now the only surviving member of the family.

The parts played by the great factors—heredity, environment, and persistent effort—are here recounted.

CONTENTS

											1.	AGE
FRONTISPIECE											٠	2
DEDICATION										٠.		5
Publisher's l	For	EW	ORD	٠.								9
Introduction	rj	Dar	id	Stat	rr J	ora	lan	٠.				11
Biographical	No	ŲΈ										13
ANCESTRY .												15
THE FATHER												23
THE MOTHER												29
THE NEW EN	GL.	ND	\mathbf{H}_{0}	ME								37
Снпрноор												47
Вочноор .												55
Youth .												65
Young Mane	1001	٥.										77
THE JOURNEY	TC	C.	\LII	ORN	II							83
FIRST IMPRES	SIO:	NS (of (CAL	FOF	RNIA						93
BEGINNING IN	1 C.	ALI	OR	NIA								113
VISIT TO MAS	SAC	HU	SET'	rs 11	N 18	388-	-P	ART	I			121
VISIT TO MAS	SAC	HU	SET'	rs 11	N 18	388-	_P	ART	II			132
LIFE IN THE	Vin	E-C	ovi	CRED	Co	TTA	GE				•	145
Conclusion												155

ILLUSTRATIONS

								 1/4
$A\ Group\ of\ Portraits$.						•		
${\it Father \ and \ Mother}$								
Alfred and Emma Burba	mk							
The Burbank Home at L	ancas	ster						
Nashua River								
The Church at Still River								
The Brick Schoolhouse .								
The Home in Lunenburg								į
The Vine-Covered Cottag								
Burbank Among the Flow	vers l	by ti	he (Free	enh	ouse	· .	1,
Luther Burbank and Sist		-						
	•							

ANCESTRY

"We are all the products of heredity and environment."

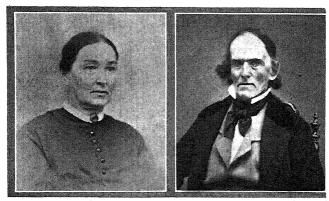
—Luther Burbank.

ф

In the waters of the great river, carrying the commerce of the world, we do not recognize the thousand little rills that combine to give it depth and power. Here a tiny brooklet, which a fallen tree or a rock bank might have turned into other channels, comes down a gently sloping illside and across a green meadow; there a tream comes dashing over rocks, creeping mader obstacles, and through dark canyons, ach in its own way gathering volume and orce for the work before it.

So in human life, currents of mental, moral, and physical traits, acquired through many enerations, these in turn made up of countless ittle streams of life tendencies flowing down incestral hills, unite to form character.

It may be of interest to the reader to follow for a little way some of the streams of heredity



Olive Ross Burbank, Mother.

Samuel Walton Burbank, Father.

and environment which, combined, gave to the world a Luther Burbank.

The Burbanks were of English extraction, although the name Bermbank (as it is sometimes spelled) glimpses Holland, and no doubt a branch of the family were, in the fifteenth century, Belgian-Dutch.

We are told of five Burbank brothers coming to the New World from the North of England, but the first authentic record is to be found in the Custom House at Boston, Mass. Joseph Borebank came in the ship *Abigail* from London in 1635; and John Burbank, from whom in

traced in direct line our family, was made a voter at Rowley, Mass., in 1640.*

The following brief record of our line in the Burbank genealogy shows the rather unusual maturity of parents, as five generations cover a period of over two hundred years: John Burbank a voter at Rowley, Massachusetts in 1640; his son, Caleb Burbank, was born 1646; when 35 years of age his son Eleazer Burbank was born 1681; when 26 years of age his son Daniel Burbank was born 1707; when 39 years of age his son Nathaniel Burbank was born 1746; when 49 years of age his son Samuel Walton Burbank was born 1795; when 54 years of age his son Luther Burbank was born 1849.

Luther Burbank, in his personal history, says: "All my ancestors and all my relatives on both sides, as far as known, without exception have been industrious, happy, prosperous, respected, self-supporting citizens in their several communities. Not one of them, either on the Burbank or the Ross side, has been deaf, blind, imbecile, insane, incompetent, intem-

^{*}George Burbank Sedgeley of Phillips, Maine, is preparing a complete genealogy of the Burbanks in America.

perate, or addicted to the use of drugs o liquor."

In the list of soldiers in the Revolutionary War the name appears Birbank, Burbanck Burbankes, Burbanks, Burbect, and Burbank

The Burbanks of New England were generally farmers, manufacturers, teachers, and clergymen; throughout their generations it has been easier for them to solve a mathematical problem than to drive a nail, and they could make a political argument more successfully than they could make a flower to flourish.

At the time when our national history so largely centered in New England, few families were more eminently represented in the learned professions, in civil enactments, and public reforms.

In the old burying grounds in the vicinity of Boston and Concord, where sleep Emerson, Holmes, Lowell, Longfellow, Hawthorne Thoreau, Phillips Brooks, and the Alcotts, may be found many quaint moss-covered stone upon which may be deciphered the name Burbank.

Nathaniel Burbank, our grandfather, wa

born in Sutton, Mass., in March, 1746; when a bachelor of mature years he married the vidow, Ruth Felch Foster, and to them seven thildren were born, five sons and two daughters. He was at the time of his marriage engaged in the manufacture of paper in Harvard, but in 1797 he removed with his family to Lancaster and purchased a farm which has since, until recently, remained in the Burbank family. Here he engaged in the manufacture of brick and pottery and spent his remaining days, passing away in 1818. His wife survived him many years, dying in 1835. The stones which mark their last resting place may be seen in the family plot at North Lancaster.

The Felchs were descended from a royal family of Wales and Grandmother Ruth was rather proud of the family coat-of-arms. She was quite a politician, keeping herself informed as far as possible of all that was transpiring at the capital and she was very fond of discussion. Grandfather was a quiet, peace-loving man. It is said that when his wife and sons left the Unitarian Church at Lancaster to join the more recently established Baptist

Church at Still River, a little village in an opposite direction from the home, he still plodded on foot each Sunday to his own church. When asked why he did not go with his wife and sons he replied that the first parish of Lancaster always suited him and he had no reason to change.

Some characteristic anecdotes are told of him: One time he went to a "Vendue"; a neighbor (a sly joker) was standing just behind him and wickedly, though slyly, stuck a pin into the man in front of grandfather. The man turned and swore at poor astonished grandfather, who made no reply. But at a third stab he, in a fearful rage, turned on grandfather, who stood calm until the man had exhausted himself and then gravely said, "Mr. B——, don't you think you will feel better some other day?" Poor grandfather had not seen the thrusts and supposed his irate friend intoxicated.

This copy of his will shows his careful consideration for his widow's welfare, and is ain original and interesting document:

A COPY OF NATHANIEL BURBANK'S WILL.

In the name of GOD, Amen.

I, Nathaniel Burbank of Lancaster, being weak in body but of sound mind and memory, blessed be God for the same, do this twentieth day of February, in the year one thousand eight hundred and eighteen, make and publish this my last will and testament in manner and form following; that is to say:

I give to my wife Ruth Burbank the use of a good cow, to be kept summer and winter; and also eighty weight of beef yearly, and seventy weight of pork, and nine bushels of corn and six bushels of rve, one bushel and a half of wheat and all kinds of summer and winter sauce sufficient for her use, and also the use of one-third of my dwelling house during her natural life, the said third to be chosen by her; and also a sufficiency of good firewood cut fit for the fire at the door, a horse and carriage for her use, and also a good doctor procured for her when needed, and paid, and all her grain carried to mill and the meal returned to her, and also to be comfortably clothed; and also to have the use of all my furniture during her natural life, and at her decease the said furniture is to be equally divided between my two daughters, Mehitable Barrett and Lucy Ball.

Item: I give to my beloved son, Daniel Burbank, the use of my shoemaker's shop to work in whenever he pleases, and an equal right to work in my brickyard for his own emolument with my two sons hereafter named, and to pass and repass to and from the same, and also

one acre of land where the old barn used to stand, beginning at the road leading to Harvard and bounding cland belonging to the sons of Timothy Lewis, deceased

Item: I give to the heirs of my beloved son Cale Burbank, deceased, the sum of fifty dollars, to be well an truly paid to them by my executor after my decease.

Item: I give to my beloved son Nathaniel Burban! the sum of fifty dollars, to be well and truly paid to him by my executors after my decease.

Item: I give to my two beloved sons, Samuel Walton, Burbank and Aaron Burbank, all my lands and buildings and stock and farming tools not before disposed of in this my will whatsoever, whereof I shall die seized in possession of, by their well and truly paying all my just debts and funeral charges.

Item: I make and ordain them to be executors of this my last will and testament.

In witness whereof I, Nathaniel Burbank, have to this my last will and testament set my hand and seal the twentieth day of February, in the year of our Lord one thousand eight hundred and eighteen.

Signed, sealed, published and delivered by the said Nathaniel Burbank as and for his last will and testament, in the presence of us who at his request and in his presence, and in the presence of each other, have subscribed our names as witnesses thereto.

NATHANIEL BURBANK. [SEAL]

Consider Studley.

Jabes Damon.

DARBY WILLARD.

THE FATHER

"A good heredity from a clean upright ancestry is more to be desired than all the titles, honors, and wealth that earth can ever bestow."

—Luther Burbank.

ф

Our father, Samuel Walton Burbank, was born in Harvard July 15, 1795, being two years of age when grandfather moved to Lancaster, where his life was spent.

In 1816 father and his younger brother Aaron made the brick for the Unitarian Church in Lancaster. From the proceeds of this work, in 1818, shortly before their father's death, these brothers built the Burbank home, a large, square, brick house, divided by a hall through the center and with an ell kitchen on each side. In this home father spent the remaining fifty years of his life. The home is still occupied and stands under the swaying branches of a great elm tree, which was set out by father in 1821, about the time he brought his bride, Hannah Ball of Townsend, Mass., to the home. If the old home could tell its story, how much of the sublime as well as the common-

place it would reveal, of hopes and disappoin ments, of joy and grief, of struggle and o triumph.

Three sons and five daughters came the brighten the home, and then the mother was called away in 1840. Mary Ann Rugg of Lark caster was the second wife, but she and her infant son and daughter were soon also called away, and again the home was left desolate and the children motherless.

In June, 1845, he married Olive Ross of Sterling, Mass., to whom were born five children. The first two died in infancy; Luther, the next born, was the thirteenth child of the father, born March 7, 1849; another son, Alfred, and a daughter (the writer) were later born into the family.

Father was a man of strong convictions and strict integrity combined with good business ability.

In his account book were found such iterns as these: 1 lb. pork, ½ bushel potatoes, etc., charged against a rather thriftless neighbor. When asked why he made these charges when he well knew the man would never pay, he reserved.

plied, "I think it best for him to know that I keep an account with him." Whether father thought the knowledge of the account would be an incentive to greater effort on the part of the man or that he would feel more self respect, is not known.

One winter he engaged this same man to chop wood, paying him by the cord. After a few days he came to father saying he "could not earn his salt chopping by the cord," adding that he must be paid by the day, to which our good father agreed.

He loved his children tenderly, and gave to each the best care and education in his power. His love of reading and classic taste kept the home supplied with good literature. The children had books and papers suited to their taste and ability.

Never arbitrary, he may have been too kind and indulgent. Someone once asked brother Alfred if father gave him a whipping for some misconduct. Alfred seemed loath to reply, for he knew he deserved it, but he at last said "No, but he offered to," and that is as near as any of us ever came to a whipping.

Always sincere, father was known in the neighborhood as one who could be depend upon. He served in important offices in the town, yet preferred home and business relations to outside interests.

He was an unusually prosperous farmer, but with a large family, he found it necessary tengage in manufacturing also.

As there were extensive banks of fine clay on the farm, and as pottery was then in demand, he carried on the manufacture of pottery for several years. Later, however, as there was created a demand for brick, owing to the building of several large manufacturing plants in the vicinity, he supplied brick for the "Lancaster-Gingham Mills," the "Crocker-Burbank Paper Mills," and other large buildings.

As much wood was required for burning of brick, father began buying woodlands. His judgment of growing woodlands was excellent; and as he employed a number of men each summer to make and burn brick, some of these were engaged each winter in cutting and hauling wood for the following summer's use.

Most of father's children who lived to man-

horod and womanhood were teachers. In sister Jame so deeply was the thought of school life entrenched that among her last words were these: "Am I being kept after school?" "When it is four o'clock I will take my bonnet and hurry home."

Marin County, California, owes much to the oldest son, George W. Burbank, who in 1854 came to this state. He was active in securing government titles to many home-owners in that county, as much of the land was in litigation until 1863, when the case was carried to the Supreme Court of the United States. He held many public offices and was a member of the twenty-fifth session of the California Legislature. He is, however, best remembered by his interest, generosity, and kindness in private life. He died at his home in Tomales, March 15 1901, leaving one son—George W. Burbank, Jr.

David, another brother, made his home for many years in Marin County, purchasing a farm adjoining his brother George's. In 1918 he died at his home in Petaluma, leaving two sons, David B. and Herbert E. Burbank, both of whom now own ranches in Marin County. Brother Alfred was a farmer and a natulover who was especially interested in animilife; he sleeps in Santa Barbara, by the swhere he was buried, near his home, in 1923.

The writer is now the only surviving men ber of the family.

Uncle Aaron, who owned and with his family occupied one-half of the house, was a Baptist minister of considerable ability. Of his two sons and two daughters, all were teachers. The eldest son, Professor Levi Sumner Burbank, was for some time president of Paducah College, in Kentucky, also principal of Lancaster Academy and of Lowell High School. He was one of the first members of the American Association for the Advancement of Sciences, and wrote a number of books on scientific subjects. He was at one time curator of geology of the Boston Society of Natural History and had a very large and well selected geological collection. He was a friend and associate of Louis Agassiz.

THE MOTHER

th In child rearing, environment is equally essential "In heredity." —Luther Burbank.

Down the aisle of the old Unitarian Church in Sterling, Mass., in the year 1810, from the altar where they had plighted their faith, came what was said at that time to be the handsomest couple ever married in the church.

Peter Ross, blue-eyed and slight build, was of Scotch blood; while the bride, Polly Kendall Burpee, dark-eyed and beautiful in form and feature, was of French descent, belonging to the family of which W. Atlee Burpee, the great American seedsman, is a descendant.

The Rosses had been long on American soil, having come in the seventeenth century from Ross Shire, Scotland. Many of the later members of this family are numbered in "Clan Ross in America," an organization of some standing of which Sir Charles Ross of Balmagown Castle, Ross Shire, Scotland, is honorary chieftain.

The home to which these young people cau was an humble one, yet it was always made comfortable by strict New England industry and thrift. Children came and a full circle, the in all, graced the fireside and filled the talk. It was a hard struggle to keep the little of the fed and clothed. While the young mother state at her spinning wheel through the long day, she directed the older girls in the simple household tasks and in the care of the younger children with a patience and a quiet firmness which guided the household in ways of pleasantness.

One room of the house was used by the father as a workshop. Here during the long New England winter he made and repaired furniture for his neighbors and sometimes was called upon to fashion the plain coffin in which they were laid to rest. The children spent many happy hours playing on the floor among the long curling shavings at his feet.

In summer the small farm required most of the time of the father and young sons. The stones were removed from rocky hillsides, and with them walls were built giving boundary lines to the fields. Many of these walls, now moss and lichen covered, still remain doing duty as of old.

Peter Ross, although a cabinet-maker by trade, was by nature a horticulturist, and was the originator of several new grapes. He was best known at the time by the superior fruits and vegetables produced on his place. He was a rather frail man, suffering all his life from attacks of heart disease, yet he lived to the advanced age of 87 years, retaining his ambition and enthusiasm to the last. He was clearing the brush from a very steep rocky hillside in order to set it with grapevines when he was called by death. He was found one bright summer day sitting on a big rock, apparently resting, as so often he had done, but life had quietly gone out. The active, executive wife and loving mother preceded him but a few years to the other life.

Olive, the mother of Luther Burbank, was the second child, and was born April 7, 1813. She was especially fond of nature even as a little child. She used to bring into the house so many wild flowers, bright-colored leaves, and pretty stones that the busy mother would be compelled to sweep these treasures fraction chairs and floor, much to the sorrow of build little girl. She loved the robin, bluebird, and wren, their plumage as well as their notes of joy, and her first effort with pencil was sketch the birds that flew about the door.

One hundred years ago railroads were unknown; there were few vehicles of any sort, and most of the journeys were made on horseback, while heavy loads were drawn by oxen. Cooking was done on an open fireplace, the kettles hanging from a crane. If, by chance, the fire went out, a child was dispatched to a neighbor to "borrow a coal." Matches had not yet come into use, but a tinder-box was kept by which a fire could be generated if need be.

All the clothing of the family was made in the home, the mother doing also the spinning and weaving. Less clothing was worn than at present, and children often trudged through the snow to school thinly clad and sat six long hours on high ill-proportioned seats, with feet swinging in the air, listening to older pupils recite unintelligible lessons. Mother used to say in her later years that one of those days at school seemed longer to her than did a year in her womanhood. One of her schoolmates was Mary Sawyer, the true heroine of the poem "Mary had a little lamb." Mary was her senior by several years, and the incident of the lamb at school which gave rise to the familiar poem occurred before her school life began.

The habit of liquor drinking was then more general, although less excessive than now. In accord with the general custom, a large mug of "hot toddy" was prepared on "election day" and other holidays. Each member of the family, to the youngest child, was expected at least to sip from the mug. Olive at an early age became disinclined to follow the custom and refused to taste the liquor. At the age of thirteen she signed a temperance pledge and was during her life an advocate of temperance.

In this humble home there was much of family life and companionship. When other tasks were remitted the father taught the boys to weave baskets from slender willow branches gathered from the banks of meadow streams; the girls braided hats from finest of the wheat straws, which had been carefully selected and saved for this purpose. These hats were sat the country store. In the attic chambal where were kept the willow strands for bask weaving and the unfinished work, heaped the floor, in one corner, were glistening brown chestnuts; in another, big, rugged butternuts and the plump hickory nuts, in larger quantity, filled a bin by themselves.

Work and pleasure were combined in the gathering of the nuts, picking the apples and husking the corn, and also in the excursions for wild strawberries, low-running blackberries on the hillside, and huckleberries in the pasture lands. Olive was especially fond of these out-of-door tasks and of rambles in the woods gathering wild flowers, lupines, goldenrods and asters.

Books then were few and even those not of a nature pleasing to childhood. Only homemade candles by which to read, yet around the glowing fireside, with popping corn, roasting chestnuts, and apples, there was enjoyed much more of neighborly hospitality than now exists.

In such an environment Olive, the quiet nature-loving child, who loved to dream and

watch the fleecy summer clouds, imagining the strange, weird shapes to be human souls on their return journey to their eternal home, became the practical, energetic woman.

Mother was of a very intense nature, walking with firm step and speaking with the falling accent. Always active, her life was filled with labor for others. Marrying into a large family she looked after the household with scrupulous care. Being naturally expert in reading character she was of great assistance to father in his business, as he dealt with men of all classes. Mother possessed unusual powers of prescience and felt coming events.

At 64 years of age, her hair still black and eyes sparkling, she sold her home at Lunenburg and the home at Ayer, making all preparations herself, and came alone to California, stopping on the way to visit her oldest sister, then living in Iowa.

Her three children had preceded her to California, and great was her joy in meeting them, especially Luther, her eldest son, with whom she spent the remainder of her life, and with whom she was always very closely linked in



Alfred Burbank, Brother. Emma Burbank, Sister.

affection, interest, and tastes. She never regretted coming to the "Land of Sunshine," and no doubt her life was greatly lengthened by it. She died at Santa Rosa, at her son's home, in 1909, at the age of nearly 97 years.

Almost to the last she took an interest in Luther's work, loving plants with the same sympathetic feeling that he had for them.

It was wonderful to see how her always active mind made the return journey. She reviewed one by one in reverse order the pictures hung on Memory's wall, until she was again a child on her mother's knee.

THE NEW ENGLAND HOME

"Trees, plants, and flowers are always educators in the right direction." —Luther Burbank.

ф

As the hand of the dyer is colored to the material in which he works, so the character of the child grows in harmony with its environment. The eye that sees the beauty and grandeur of Nature, the ear that hears her matchless symphonies, becomes in harmony with her.

Had Newton and Franklin been born deaf or blind, would the one have discovered the law of gravitation, the other bottled the lightning? Could Luther Burbank have so entered into Nature's secrets as to be able to mold plant life to the needs of humanity if he had lived his childhood remote from trees and flowers—unobservant of earth and sky?

New England is a land of charmingly diversified scenery and oft-changing seasons. From the first peeping of the pink and white buds of the trailing arbutus from beneath the melting snows of March until the purple wild aster

lies down to sleep amid the falling leaves, all plant life is active.

In the center of the great commonwealth of Massachusetts is Worcester County, which furnished the first commander-in-chief of the American Army, Artemus Ward; gave to the world the historian, George Bancroft; the ideal statesman, George Frisbie Hoar; the great inventors, Eli Whitney and Elias Howe, and those noble women, Dorothy Dix and Clara Barton.

In this county is the town of Lancaster, one of the most beautiful in all New England. The picturesque scenery is of the English type, the wooded landscape being diversified by low, sloping hills, rich intervals, sparkling streams of pure water and enchanting little lakes like bits of blue sky dropped down to earth. The treasures of meadows, field, and forest are there — wild flowers, berries, fruits and nuts. The thousand varied tints of autumn foliage lend rare beauty to the closing year, yet perhaps the most distinctive charm of Lancaster is the great elm trees that grace its streets and roadways.



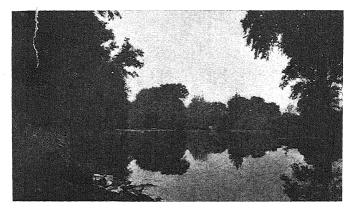
The Burbank Home at Lancaster.

Lancaster is rich, too, in its historic associations. More than two and one-half centuries ago, in less than twenty-five years after the landing of the Pilgrims, a tract of land ten miles long and eight miles wide was purchased of the Indian chief Sholan of the Nashaway or Nashawogs—a tribe of Indians whose wigwams were located there. In the year 1658 the township was incorporated under the name of Lancaster. Much has been written of the privations and dangers of these early settlers, and traces of Indian life linger in the names of

some lakes and streams. The stern Pilgritan of 1620 landing upon these rocky shores found that climate and soil were inhospitable to ignorance and indolence, and in warfare with winter, adversity, and struggle, and holding high ideals, developed self-reliance, hardihood, and courage which made much for intellectual and moral wealth and strong convictions. In habits of industry and thrift, these pioneers laid a sure foundation for the future development.

About three miles north of Lancaster Center, just off the Harvard Road, was the Burbank homestead, a typical New England home—the large, square brick house, standing well back from the street, beneath the swaying branches of a stately elm tree. Over the door climbed the white jasmine, while lilacs, roses, lilies, and other old-fashioned flowers filled the yard and looked from the windows of the cheery living-room.

The house was occupied by the families of the two brothers, Samuel Walton and Aaron Burbank. The farm, consisting of about one hundred acres, was divided between the two brothers in a very peculiar way—each owning small



Nashua River.

pieces here and there. This division probably was made in accordance with strict justice that each might have the same amount of orchard, field, pasture, and woodland. Each brother also owned a brickyard, where bricks were manufactured each summer. Uncle Aaron, who was a Baptist minister, spent much of his time in ministerial work, while father had large holdings in woodlands, the cutting and marketing of which required considerable attention.

The home was filled with intellectual activity, being near Concord, then the center of

American literature, famous as the home of Ralph Waldo Emerson and other men and women whose thought was influencing the world. All the household was greatly interested in the great leaders of the times—Lincoln, Webster, Sumner, Agassiz, the Beechers, as well as Emerson, Thoreau, Longfellow, and the Alcotts, some of whom were personal acquaintances and sometimes guests at the home. Ministers, lecturers, and teachers were always welcome.

The home life was of the strict New England type (although our parents were more reasonable and indulgent than the earlier Puritan ancestors), containing intense interest in questions of human destiny with close application to practical affairs. (Blessing at the table and Bible reading and prayer each morning before the day's work begun.)

It was a busy, active household in which each member was assigned some task.

The older brothers and sisters were going out from the home, and mother not only looked after the ways of the household, but during the winter months performed most of the work for the family, although in summer time, when men employed in the brickyard must be boarded at the house, help was employed in the kitchen. Father had a good many interests the farm, brickyard, and the woodlands, as well as public matters.

Habits of industry and self-control make for happiness; and it was a happy household with its simple pleasures.

No expensive manufactured toys could equal Nature's lavish gifts to the children of this home. The bank of clean white sand where many happy hours were spent in laying out villages, with streets, homes, gardens, and orchards in miniature, caused a sister to ask "What do poor children do who have no sandbank to play in?"

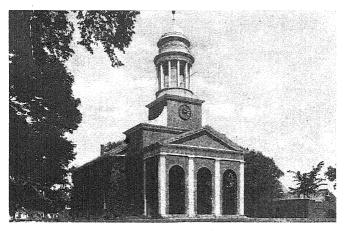
Mother's flower garden, the patch of wild strawberries on the hill, the cold spring of purest water, the orchard, and the woodlands were sources of joy to the children.

Perhaps best of all was the wide fireplace, with its burning logs, and father's stories of great men and women, and of the birds and animals, teaching lessons of thrift and prudence.

Then there were social evenings when a neighboring family came in. Apples, nuts, popping corn and perhaps candy-making formed the entertainment.

During the Civil War each evening some member of the family was dispatched to the little railway station at Still River for the daily paper, which mother read aloud to those who cared to hear the war news. The children were not much interested. One thing, however, stands clearly in the memory of that time. Owing to the extremely high price of wheat flour, we lived for some time on brown bread, made of rye and corn meal. To the muscle-building qualities of this diet my brother, in later years, attributed much of his power of endurance.

Luther, with the writer, visited the old home in September, 1914. Up to that time the property had remained in the Burbank name, but was soon after sold. The house was then in a very comfortable condition although nearly one hundred years old. Few changes had been



The Church at Still River.

made in the surroundings. Some of the hillsides and pastures had been allowed to grow up to trees, the orchard had been neglected, and, although some of the same old trees were still bearing fruit, it was of a very inferior quality. The old elm tree in whose shade our childhood had been spent still stretched its long swaying branches over the house.

We visited the cemetery where sleep three generations of Burbanks. Also the little Baptist Church at Still River of which father was a member for more than fifty years. Lancaster Academy and the little brick schoolhouse of our childhood were gone.

We saw stored away in the attic the little blue wooden cradle in which each baby of the family had been rocked to sleep.

Rock little wooden cradle
Painted blue;
Rock for the hearts that fondly
Dream of you.
Rock for the little babies
Eyes of blue
That have wandered far from
Home and you.

CHILDHOOD

"Every child should have mud pies, grasshoppers, water bugs, tadpoles, frogs, mud turtles, elderberries, wild strawberries, acorns, chestnuts, trees to climb, brooks to wade, water lilies, woodchucks, bats, bees, butterflies, various animals to pet, hayfields, pine cones, rocks to roll, sand, snakes, huckleberries, and hornets; and any child who has been deprived of these has been deprived of the best part of his education."

—Luther Burbank.

ф

It is said that: "As certain lilies draw their colors from the subtle qualities of the soil hidden beneath the water upon which they float, so are men profoundly affected by the obscure and insensible influences which surround their childhood and youth."

The year 1849 was in New England an active, busy year, as gold had just been discovered in California, creating such an excitement as, with single exception of that occasioned by the memorable Boston Tea Party of 1774, and the subsequent events, probably had not been equaled in American history. During this and the two following years many were preparing to cross the plains in quest of the land of gold.

And in the same year in this New England home was born the one who, in after years, would discover greater wealth in plant life and mine more precious treasure from tree and vine, from grass and grain, than colored the dreams of California's most ardent gold-seeker.

On March 7, 1849, Luther, the thirteenth child, came to this home. It was at the time when winter was relinquishing its icy hold and all nature was awakening to growth and beauty that Luther Burbank came into the world.

Brothers and sisters, as well as loving parents, greeted the frail child with joy. His welcome was perhaps made the more tender because of the fact that the four little ones who had preceded him had been called away so early from the school of life, with its lessons all unlearned.

Often, as the summer approached, the little blue wooden cradle in which each baby of the family had in turn been rocked was placed in the yard among the flowers. Morning glories—blue as the baby's own eyes—smiled to him a sweet good morning. He watched the faces of

the great golden sunflowers as they followed the sun in its course, and at evening the swinging canterbury bells chimed vespers for him.

When a blossom was placed in the baby hands his joy was apparent; he never destroyed a flower, and if a petal fell his endeavor was always to replace it. Flowers were his first toys and treasures and became his playmates and companions.

It was during the second year of his life that the following incident occurred: A hummingbird on fluttering wings began sipping from the nectar cup of a scarlet fuchsia growing in a jar on the window-sill. Quick as a flash the little hands caught the bird, and holding it, he cried out in grief, "Birdie eat flower! Birdie eat flower!"

The mother, ever intent on leading her children into a knowledge of nature's ways, explained to him that the bird was not injuring the flower, but only taking the food provided for it by the same power that gave the beauty to the blossoms. Very gently the little hands unclasped and "birdie" went unharmed. From that time the visits to the gardens of the birds,

bees, and butterflies were welcomed by the growing child.

Luther was a quiet, sensitive child, and not being altogether understood he sometimes suffered undeserved rebuke. Once soon after he began to make his way among the growing plants in mother's flower garden he was found trying to replace in the ground an uprooted plant. As it was thought he was endeavoring to undue his mischief, he was reproved. Later it was discovered that another had uprooted the plant and it was only the child's sorrow for its destruction that led to his efforts to reset it.

The story has often been told of the cactus plant which the baby boy made his most constant companion, until one sad day he fell, breaking both jar and plant. This might have been a prophecy of the cactus chapter of his later life.

The same may be said of the daisy. On the hillside in front of the house grew some little wild daisies. These Luther cherished. During the warm summer he was often seen tugging a little pail of water up the steep bank, and the

daisies flourished under his loving care. Once when he had been reproved his cousin Calvin found him later lying among these daisies, sobbing as if his heart would break and saying over and over again: "The daisies love Luther; the daisies don't scold Luther; the daisies love Luther!"

He has told us that one of his first memories is of mother's taking him to the meadow with her and placing him among the tall June grasses, while she gathered the big scarlet strawberries. A mischievous crow, a pet of one of the neighbors, flew down and began pulling at his bare toes; he remembered, too, his fright and cries, as well as mother's efforts to drive the big bird away.

Another very early recollection is of pinched fingers. Both father and mother were fond of investigation, keeping pace with the times. It was in the early days of spiritual manifestations. One evening there was a "table tipping" with a few neighbors at our home. Luther was playing about on the floor, but he, too, wished to investigate, so he crept under the table to see what made it move, when suddenly the table

came down with some force on his fingers. That was, I think, the last of table tipping in our house.

One of his most noticeable traits was a shyness and shrinking from notice, a trait misunderstood and sometimes punished. Once a visitor gave Luther an orange. Mother labored long and earnestly to make him say thank you, but he so persistently refused to do so that the parents, believing it to be obstinacy, took the orange away from him. After the lady had left he was heard saying to himself "Sank you lady," and they saw that what was thought to be obstinacy had been only extreme diffidence causing his refusal to speak in the presence of a stranger.

One old lady in the neighborhood used to call the shy little boy a "dummy" and declare he would never amount to a "hill of beans." She did not live to see what the "dummy" would amount to, or how much a "hill of beans" might be improved by his work.

When there were guests whom he thought might remain to dinner, the sensitive, thoughtful child, shrinking from strangers, would count the plates and if more than enough for the family were laid he would say "I don't want any dinner" and quietly slip out of doors, seeking the old Maltese cat, of which he was very fond.

Among his early pleasures must be counted the visits to Grandfather Ross's home at Sterling. Grandmother's cookies — grandfather's big red apples and baskets of hickory nuts from the attic were never forgotten. As he grew older there were visits to grandfather's garden and orchard, where were learned lessons in fruit culture and improvement, of which his elders were all unaware.

The evenings, when the family gathered about the ample fireplace and father told of the heroes and heroines of the past and of animals and plants, were enjoyed by all, and no doubt the books read and the stories told had a large place in the mind of the child Luther.

BOYHOOD

"The farm is the foundation of our best manhood and womanhood, the true hope and strength and glory of the world."

—Luther Burbank.

င်္ခာ

ABOUT ONE-HALF mile from the Burbank home was the district school. In a small brick building, nestled among the pine trees, fifty or more boys and girls of varying ages and grades were under the care of one teacher, with plenty of trees to climb, hills to coast, a pond for swimming in summer and skating in winter, no modernly equipped playground could furnish more fun or better advantages for physical development.

The winter that Luther was five years old his brother Herbert was the teacher. After mother had put on his coat, cap, and mittens, tied a warm scarf over his ears and kissed him good-by, the older brother would draw him to school on his little handsled. The sled ride was great fun for the boy, but as he was too young for school life, and being so sensitive a child, he shrunk from the fun and laughter of the older boys.

(55)

His next teacher in the school was his sister Jane, who had recently returned from Pennsylvania where she began teaching when only fourteen years of age, and who, although very proud of Luther's ability, found it very difficult, because of his diffidence, to induce him to recite in the schoolroom the lessons which she knew he had mastered easily and perfectly.

As he grew older he overcame much of the timidity, and being very fond of study became a leader in his classes. He, too, was the leader of the little band of barefoot boys and rosycheeked girls who sought the sweetest strawberries in the tall June grasses, the biggest blueberries growing in woodland pasture, and the finest hickory nuts and chestnuts among the rustling leaves.

He knew the sweet birch and sassafras trees with spicy bark and where the best chewing gum could be obtained from the spruce trees in the swamp, also the ferns and sweet flag with edible roots. These excursions to near-by fields and woods had a far greater charm for him than did a game of marbles or ball.

In summer with his playmates he waded

brooks, walked on stilts, made whistles, popguns, kites, bows and arrows, and toy canoes, and in winter it was he who mended the broken sleds, planned the snow forts and barricades, and coasted the steepest hills.

A little girl companion of whom he was very fond was one day coasting with him on his "double runner." After several happy trips down the hill Luther decided to try the steeper bank. It was a rather hazardous experiment, and just as they started he turned to his companion and said, "Now, Mina, say your prayers; we are going over the bank." As the little girl was too startled to respond, he began hurriedly, "Now I lay me—" when lo! the sled had turned in going over the bank and the little boy and girl crawled out from a great snowdrift, rosy-cheeked and laughing.

Another factor in Luther's early education was no doubt the little Baptist Church about two miles from the home at the village of Still River. Of this church our parents were members and faithful attendants. The children were expected to attend the Sunday school and at least one of the two preaching services each

Sunday. The old-fashioned high pulpit, the pews in which each family from the oldest to the youngest were seated before the door closed—all were a part of Luther's childhood. It was soon discovered that Luther preferred to be the one member of the family allowed to remain at home to prepare the dinner, rather than to attend the services. As he was quite proficient as a cook he was often allowed to do so.

At home Luther had tasks to perform—tasks well known to a country boy—the wood to bring, weeds to pull, chickens to feed, the cows to drive to pasture, no doubt the cradle to rock, for into the family had come another little boy and a baby sister. Yet he had time to build windmills, water-wheels, and, as he grew older, a toy steam-engine. He was awakened in the morning with the song of the robin and the thrush and was lulled to slumber at night by a chorus—that orchestra of nature—of greencoated frogs. To one of so intense a nature, life was rich in the wealth of Nature's gifts.

In the meadow-brook he placed his waterwheels and floated his bark canoes. In the clear rippling waters he waded among the nodding heads of golden cowslips and on the mossy banks gathered the reddening cranberries and the delightful fringed gentian. Another joy was a stroll over Pine Hill down by the cinnamon roses, the sweet flag, and cold spring, across the interval where the shagbark nuts grew, to the beautiful Nashua River for a swim in its smoothly flowing water.

As father had considerable acreage in the woodland, where men were employed during the winter months cutting wood, he used often to visit the woodlands to supervise the work. He always loved to have his children with him, and Luther, with his younger brother and sister, greatly enjoyed these woodland excursions—a ride on the woodsled over the grassgrown or snow-covered roads leading across the pasture and up the hills, under the branching pine, oak, and chestnut trees.

Being a lover of animals father called our attention to the habits of the ants, birds, and squirrels, telling of their wondrous ways. Luther saw not only the jay, bluebird, and robin, but with a mind ever intent on seeing and knowing, hunted rare and curious flowers,

wild mints, the tiny velvet mosses, seeing much that was unseen by others.

Before leaving home to make his fortune in California, brother George had grafted many of the trees in the orchard to better varieties of apples. Luther, then only a boy of five, was greatly interested in the work, but could not quite understand why so many fine large branches were cut off. George explained the process to the boy, who took delight in watching the grafts develop. After a few seasons when the grafted trees began to bear the fine juicy Baldwins, Greenings, Russets, and other varieties of apples, his joy was complete.

He spent much time in the apple orchard; he watched the swelling buds throw off their coats of brown, unfurling pink and white banners to attract the winged messengers of the air. As the blossoms faded he watched the tiny apple form, then redden in the sun. It was he who discovered the first faint coloring of the Early June and Williams. He became acquainted with the names of many kinds, for one of his early treasures was a book with descriptions and pictures in outline of the various fruits.

With many of the pleasures of the New England home is the apple associated—the blooming trees in the springtime; in autumn the gathering and storing in bins and barrels until the cellar was rich with their fragrance. At that time, too, the great brass kettles were hung on cranes in the ample fireplace of the living-room for the boiling of the cider, while the family gathered around the cheerful flames, paring and quartering apples for the winter's supply of cider applesauce; there was reading, mirth, and story telling.

That Luther early learned the value of seeds as promises of future growth is seen in a letter to his brother in California, dated January 3, 1864. He writes: "We all want to see you very much. When you come will you bring the seeds of some of the plants that do not grow here, and some of the minerals, too?"

When in early spring the moist earth was made smooth and mellow by cultivation, Luther watched the planting in the vegetable garden of peas, beans, beets, carrots, and other vegetables and saw the little tomato, pepper, and cabbage plants carefully transplanted

from the boxes in which the seeds had been sown, even before the snow had ceased to cover the landscape, and set in the ground now ready for them. He was assigned a garden for his own, where in tending it many hours were spent, and no doubt most valuable lessons learned. The work often tired the muscles, but the growing plants were a continuous delight, and harvest time a rich reward. The great golden pumpkins, many of them bearing curious pictures and inscriptions which had been traced on the tiny fruits and had increased in size, as did the pumpkins, appeared at the jolly husking bees and Hallowe'en parties, and spoke of Thanksgiving and winter's joys.

By the flowers that bloomed on the windowsill and in mother's garden, Luther had early been nurtured into love of the beautiful and sympathy with the flower world, and with the powers of observation awakened he was drawn into the great out-of-doors, seeing wonders and joys at every step. He roamed in the fields among the clover's red and white; along the meadow's streams he found the early willow catkins, and amid the graceful wild grasses the violets, buttercups, and daisies; by the roadside the lupine and goldenrod swaying in the breeze. In the woodlands he sought wild roses, columbines, and asters growing above the sweet fern and lowly partridge vine, and in the deeper shade the thickets of laurel. He learned the names and uses of the various roots and herbs, as well as the character of the different trees and woods. A poet at heart, he watched with delight the changing seasons repaint the landscape. He loved the transfigured forests in autumn days, with their harmonies of brown and gold, and the tender yellow of the falling leaves. He was a naturalist by birth, reveling in the trees and butterflies, the fields and woods of his native town, seeing the plants as living children of Nature.

Having all the intense nature of the mother he loved so well, the same keenness of sensibility that made him feel the beauty of the flowers, the joy of a spring morning, or the perfection of an Indian summer day, made him also sensitive to unpleasant conditions, to pain and to rebuke or unkind words. We cannot tell what visions may have been his of future work in harmony with Nature in the transformation and improvement of plants, but no doubt these simple tasks and pleasures were keys unlocking hidden doors to Nature's storehouse.

"Men's books are but man's alphabet:
Beyond and on his lessons lie—
The lessons of the violet,
The large gold letters of the sky."

-Joaquin Miller.



The Brick Schoolhouse.

YOUTH

"Every great man or woman is at heart a poet, and all must listen long to the harmonies of Nature before they can make translations from her infinite resources through their own ideals into creations of beauty in words, forms, colors, or sounds."

—Luther Burbank.

ф

THE IRON and oak of New England character made itself manifest in the settling of his great life principles during the youth of Luther Burbank.

In the fall of 1864, at the age of fifteen, he entered the Lancaster Academy. It was a well-conducted school, with a curriculum quite similar to the average college of today. The academy was located at Lancaster Center, two and one-half miles from the Burbank home. Luther usually walked to and from school each day, often retracing his steps in the evening to the town for an hour in the well-equipped gymnasium connected with the academy, as he was very fond of athletics.

There for four years he spent the winter months studying. Notwithstanding his quiet, studious ways, he became a favorite with classmates as well as teachers. In mathematics and in English composition he excelled. The afternoons when the pupils were required to declaim, as was the custom, were, however, a torture to him. After one or two ineffectual attempts to stand and deliver a perfectly committed address, he was excused from this exercise with the provision that he write double the required number of themes, and thenceforth life at the academy was a pleasure to him.

Luther was most happy at this period of his life to have the intimate companionship of a truly scientific man, our cousin, Levi Sumner Burbank. Ruskin says, "The more I think of it, I find this conclusion impressed upon me—that the greatest thing a human soul ever does in the world is to see something." In my brother's case, the habit of observing and of classifying was early formed. No plant or animal and no rock or cloud escaped his notice, and, being a poet at heart, he no doubt cherished dreams hidden deep in his own consciousness.

Each winter brought many noted lecturers to the forum in Lancaster. A deep and lasting

Youth 67

impression was made upon Luther's life by a series of lectures delivered there on astronomy, physical geography, geology, mineralogy, palaeontology, and other kindred subjects by Professor Gunning, a German.

During the summer of these years he was employed in the Aimes Plow Works at Worcester, learning the pattern-maker's trade. Being of a mechanical turn of mind, this work was to his liking. His wages being only fifty cents a day and insufficient to pay his board, with his customary resourcefulness he invented a laborsaving device whereby the work of the machinery was greatly increased, and being allowed to work by the piece, instead of by the day, as at first, he soon was receiving a very full pay envelope on Saturday night.

The evenings Luther spent in reading, and for some time in lessons in freehand drawing under the tuition of Professor Gladwin, whom he has always remembered with pleasure. Nearly forty years later he was pleased to receive, in his home in Santa Rosa, a call from a nephew of Professor Gladwin and to learn of the continued activity of his old teacher.

Luther was of an affectionate nature, very fond of his home folks, especially of his mother. Among strangers he was very reticent and almost timid. At Worcester he boarded in the family of his uncle, Luther Ross, a foreman in the Aimes Plow Works, and a man respected and prominent in religious and civil affairs. Once, when mother was visiting at uncle's, she and Luther were alone in the living-room, and Luther was telling her of the events of his life there and of things that interested him. Aunt, who was in the kitchen busy in the preparation of the supper, quietly pushed open the door a little so she "might hear the sound of Luther's voice," as she had heard him speak so few words since coming into the household.

With his uncle's family he attended the Baptist Church in Worcester, and during a religious awakening Luther became deeply interested, and upon his return home was baptized in the beautiful Nashua River and joined the little home church at Still River. This was what was known as "a hard-shell" Baptist Church. With his intense nature, he accepted so literally its severe doctrines, and they so im-

Youth 69

pressed his young mind as to make him almost morbid. In a short time, however, he repudiated the severity of the teachings, although he continued to attend church.

Records show the transfer of the names of Luther Burbank and Olive Burbank (mother) from the church at Still River to the Baptist Church at Groton Junction in 1870.

It may have been a trait inherited from early New England ancestors—certainly Luther exhibited unusual self-control in his youth. While in his "teens" one winter he read lectures on diet and water-cure, and at once began a very rigorous course for himself. Taking a pail of water to his room at night, which would be frozen over so hard in the morning that he would be obliged to break the ice with a stick of firewood, he would take a sponge bath in this ice water. The window of his room was always open and sometimes the snow would drift in upon his bed. About this time he resolved to eat no meat and only a very limited amount of food, which he carefully weighed so as not to exceed the quantity he allowed himself. All the regulations he deemed good he carried out

to the letter, until he so reduced himself in flesh and strength that our parents called in the family physician, who objected to the strenuous régime. Luther, however, always claimed that his health was permanently benefited by the experience.

Letters written from Worcester to the loved ones at home show a love of nature which city life could not overcome.

Worcester, April 25, 1869.

DEAR MOTHER:

I have been to meeting today and now have some spare time to write home. Have we not had two fine days—today and yesterday? I have just been out picking a few flowers, but do not find the familiar Mayflower.

Went to the drawing school yesterday afternoon, and after supper went through the woods to a hill where all was quiet save the frogs in a distant pond and the joyous birds. I could see a great distance in every direction. The sun had just hidden his face beyond the far-off western hills, the sky was clear except a few clouds in the western horizon whose edges were tinged with silver and gold.

I sat down upon a stump where the grass was green and enjoyed the pure air and the beautiful

Youth 71

scene around me. Looking toward the south I could see the city spread before me; in the opposite direction was grand Waschusett, which has about the same profile as when seen from Lancaster, and nearer by were smaller hills, their sides just beginning to be clothed in the robe of summer, and between them ponds as quiet and smooth as if frozen. It was a beautiful sight! I cannot describe it! My thoughts wandered over the past and future of this life which a bountiful God has given me to enjoy, and I thought "Am I growing in anything which is noble, manly, good or pure, or am I growing more beastly?" Oh! is not life itself a great blessing? Each of us poor sinful human beings have the privilege of elevating, improving, purifying, and fitting for heaven these immortal minds of ours, or we may make them a thousand times worse than that of groveling swine.

I take pleasure in studying the hundreds of faces which I meet every day. No two of them look alike. It is easy to tell the high and the low, the good and the bad, and generally the rich and the poor. Some of them always look pleasant, pure, and happy; others dirty, mean, and miserable.

MONDAY MORNING.

My string was cut short last night by seeing that it was time to go to meeting. I want very much to hear from you and Emma this week. Emma must not wait for Sunday to write, but send me one Wednesday, too, if she can afford it. When I was sitting on the hill Saturday night I might have said that I thought of a large brick house with a white ell and the friends there, about twenty miles away. Hope you are all well and enjoying yourselves. We have not been paid off yet. The company owes me about \$120. Let Emma write how she likes this mess of mental fodder, and if the rhubarb is up, and if Trip is well, etc.

I hope to hear from you soon. I enjoy reading letters from home *pretty* well. Yours with love.

LUTHER.

Monday Noon.

I have a tooth which ought to be attended to and have half a mind to come home Saturday night and come in with you Tuesday, probate day. Hope to hear from you this week. With love,

LUTHER.

The following paper written by Luther at about this time, for a little neighborhood club, gives an insight into his thought of life:

SUCCESS

What is success? It is the realization of what we hope and labor for. But in trying to obtain success we should be honest with ourselves and the

Youth 73

world; do nothing that gives a pang of conscience. If you cannot do this, sink into the depths of failure unsoiled and unspotted.

Every successful man, you may be sure, has had many things to discourage him in the course of his career; he has borne many rebuffs; he has sustained many failures. What if men do not understand you—are not inclined to encourage you and exercise the privilege of age or superior position? Bear with it all patiently and your time will come. "Hard words break no bones," saith the proverb, and they will break no spirit unless it be the feeblest. The world may laugh at your failure; try again, and perhaps it will be your turn to laugh. "He who wins may laugh," says another proverb. If you have the right stuff in you, you will not be put down.

There are various roads to success, but the surest is gravelly and gritty, with some awkward pitfalls in the way. Was that famous nursery rhyme written, think you, for the entertainment of babes? Or was it not rather meant for a lesson to children of a larger growth. Everyone knows the story, how the hero of it "jumped into a quick-set hedge and scratched out both his eyes."

That is the way with most of us, not looking before we leap; going ahead too rapidly at the outset, not calculating our strength, and jumping into the midst of what we thought we could clear at a bound; but are we, therefore, to go in the dark all the rest of our lives? It was not so with the hero of the great epic; when he saw his eyes were out he had reason to complain, but he jumped back into the quick-set hedge and scratched them in again.

And such is the right way to fight the battle of life—to grapple with the failures and disasters which beset your career. You may have reason to complain that your good intentions resulted only in a torn face, smeared with blood, but brace yourself up for another plunge. Jump into the quick-set hedge again and recover all you have lost, scratch in your eyes again, and never lose your clearness of vision for the rest of your life.

While attending the academy, Luther made good use of the excellent library at Lancaster. In a letter written by him in January, 1909, he used the following words:

When I was about nineteen, in 1868, probably the turning point of my career in fixing my life work in the production of new species and varieties of plant life was fixed by the reading of Darwin's "Variation of Animals and Plants Under Domestication," which I obtained from the library at Lancaster, Mass., my old home. Well do I remember reading that work of Darwin's—that the whole world seemed placed on a new foundation.

Youth 75

It was without question the most inspiring book I had ever read, and I had read very widely from one of the best libraries in the state on similar scientific subjects. I think it is impossible for most people to realize the thrills of joy I had in reading this most wonderful work. The reading of this book was without doubt the turning point in my life work.

At once, as soon as I was able, I purchased other books written by Charles Darwin, and today I have still one to read which probably influenced the general public more than all the rest of his writings—"Origin of Species."

I have been so busy producing living forms from the thought inspired by Master Darwin's conclusions that I have never, to the present date, had time to read his "Origin of Species." However, I imagine I could write the "Origin of Species" myself from what I have read of his other works.

Darwin was the greatest man who lived in the past century, and in his thoughtful, truthful, laborious, unobtrusive way, in my opinion, did more to liberate and ennoble the human race than any other man who lived during the century.

The second book which I purchased of Darwin's was "Cross and Self-Fertilization in the Vegetable Kingdom."

YOUNG MANHOOD

"Let us be brave harvesters in the broad field of thought."

—Luther Burbank.

ф

IN DECEMBER, 1868, our much-beloved father died after a brief illness, and the following year the family left the old home at Lancaster. The death of father somewhat changed the plans Luther had made. For some time he had studied medicine with the hope of making that his life work. This was now abandoned.

After the sale of the home to Cousin Calvin (who had already come into possession of one-half of the farm and house, through the death of his father, Aaron Burbank), the family moved to Groton Junction (now Ayer Junction), mother having purchased a pretty little cottage on the outskirts of the village.

Previous to this, during the summer of 1868, Luther suffered a severe sunstroke while running to obtain help in extinguishing a fire, which had been set by a passing locomotive engine in a valuable timber lot on the home place. Luther, then a slight youth of nineteen, was five feet and eight inches in height, but became reduced from his usual weight of 130 pounds to 120 pounds. Failing to recover from the effects of the sunstroke, in August, 1870, he made a cruise in a mackerel schooner bound for the Gulf of Newfoundland. The vessel was wrecked, but he was so seasick at the time that being taken on board a lumber raft and towed to shore seemed of small matter to him. He returned home minus his baggage, but greatly improved in health.

In the year 1871, just as he was entering manhood, Luther's real life work began. Up to this time it had been a sealed message that he bore, and while he had felt keenly, no doubt, the responsibility of the work which he felt he was to accomplish in the world, the means of its accomplishment had not been revealed to him or to others. This fact led to the opinion in the minds of those interested in his future that possibly he might never be stable and settled in any vocation. He had shown not only an interest, but an enthusiasm in many lines of investigation; not plant life alone, but animals, mechanics, medicine, literature, and

the arts and sciences, had at different times held his attention. Knowledge in these subjects all proved valuable in his plant work.

At the age of twenty-one he purchased, with the small amount of money obtained from father's estate and a mortgage, a small tract of land, seventeen acres, adjoining the home which mother had previously purchased in the town of Lunenburg, where the family then lived.

Upon this he at once began market gardening. Original and practical in his methods of raising seeds, he succeeded in producing not only vegetables of quality, but to have them ready for the neighboring city (Fitchburg) market earlier than other gardeners, thus securing the highest prices.

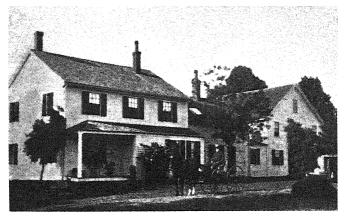
Here his first widely known accomplishment, the Burbank potato, was produced, and numerous experiments inaugurated for the improvement of plants which were continued during his life.

Here he attended the village singing school, and sang in the choir of the little Methodist Episcopal Church which stood near our home. Although never claiming musical ability, he was all his life extremely fond of music and particularly sensitive to its soothing influence.

Among his many young friends at this time, one beautiful girl held his especial regard. Some little misunderstanding occurred, and this, no doubt, had much to do with his decision to leave New England.

From our childhood, California had been a subject of conversation in the household. Letters from the older brothers who had come West—George in 1854 and David in 1859—and from brother Alfred, who had left home the preceding summer and was then engaged in carpenter work in the rapidly building city of Santa Rosa, all had their influence upon Luther.

After a few years of market gardening, in the summer of 1875 he made preparations to come to California. He sold his land and paid the mortgage. As had been his custom annually, he took an inventory of all his property—farming implements, crops, books, clothing, etc., finding that he was worth at the time \$660, including the \$150 received from the sale of the Burbank potato. Of this he paid \$140 for



The Home in Lunenburg.

a ticket to California. (The above items are from an old account book.) Although the time was short between the decision and the time set for starting, yet he had sent to various parts of the state for local newspapers, purchased and read carefully several books on California, and had interviewed friends who had visited the Golden State. From the knowledge thus obtained he decided to locate at Santa Rosa. A decision he never regretted.

In September, 1914, Luther Burbank and the writer rang the bell of a modest home in the town of Lunenburg. There was no reply, but just then the keen eye of the well-known naturalist saw a lady with scissors in hand and a basket on her arm going toward a plot bright with pinks, petunias, nasturtiums, and other old-fashioned flowers. Luther recognized the lady as Mrs. Jones, a friend of his youth, and who had lived in his old home in Lunenburg for many years. As he called to her, she (with a twinkle in her eye) turned and with surprise answered, "Oh! I thought it was only someone who wanted to see Luther Burbank's old home."

Neither the little farm nor the town in which it was located had made many noticeable changes since we left there nearly forty years before, although an electric line now ran in front of the home along the main street, where the beautiful maple trees were changing the green of summer to the scarlet and gold of autumn.

My brother's love of Nature was shown by his joyful remembrance of the trees and flowers which he had loved forty years before. He almost ran to the spots where certain plants had once flourished, often finding them yet growing there. In other instances they were gone; but none of them had been forgotten by him.

THE JOURNEY TO CALIFORNIA

"The days and hours are all too short, and there are so many things I would like to do." —Luther Burbank.

ф

THE JOURNEY across the continent was not made as comfortable in 1875 as it is now. Feeling unable to pay for a sleeping berth, Luther trusted to obtain sleep while curled up on the seat; this, too, for a period of nine days and nights.

A generous basket of lunch had been provided by mother, and as the train was sometimes delayed for hours at a time, far out on the plains, with no house in sight, he had the pleasure more than once of sharing with some passenger less prepared for an emergency.

All these discomforts were overlooked by the enthusiastic youth. Every day a letter or post-card was dispatched to the mother and sister in Lunenburg telling not of the discomforts of the journey, but of the wonders seen and the people met, always expressing anxiety for the loved ones at home, especially the sister, who was quite ill at the time. Some of these letters are here given and may prove of interest to the reader.

BETWEEN LONDON, IN CANADA,
AND DETROIT, MICH.

Have been going westward steadily since I left Worcester at a great speed. No stops longer than twenty minutes. Slept some last night. Have enjoyed every mile. Had a treat in crossing Suspension Bridge by moonlight. Saw Niagara and the rapids. Cars joggle me. Want to hear how Emma gets along as soon as possible. I wish you were all enjoying the ride and scenery with me. We are in Queen Vic's dominions. Mrs. Ward and son have stood it nicely without any trouble. Don't know where I can mail this. The sandwiches and cake are tip-top. The cars are vastly more comfortable than those on the short Eastern roads.

The forests are too beautiful for one to describe—zigzag fences. Saw Lake Ontario at Lockport last night. Will write again before long.

LUTE.

[Card from Burlington, Iowa]

Just crossed the Mississippi. Have had extra good luck in making changes, enjoying myself. Seas of corn, thousands of wild ducks.

L.B.

PACIFIC HOUSE, COUNCIL BLUFFS, IOWA.

DEAR MOTHER, ETC.:

I arrived here at 10 o'clock last night. The passengers all stopped either here or at Omaha last night. We start for Omaha from here at 9:30 this morning. I have enjoyed myself, been perfectly contented and have taken more comfort than a little in the journey. It has been perfectly delightful except changing cars at 11 o'clock at Chicago when I was sleepy. Have met a number of ladies and gentlemen who are on their way to San Francisco. Several of them stopped at this house last night. There are three ladies and two gentlemen from Fitchburg who have come all the way with us. All the people on the cars are pleasant, sociable, and obliging. All have to enjoy the scenery. The habies make some noise at times, but I can settle down in a seat and go to sleep amid all the noise and sleep as sweetly as I ever did in my life. We crossed the Mississippi into Iowa vesterday morning at 8 o'clock. It took us all day till 10 o'clock last evening to cross the state, and we went fast, too. Have seen a few Indians, but no Chinamen yet. Have eaten all my sandwiches, one-half of cake. Shall have enough to carry me twice as far as I have to go. I buy coffee twice a day. It is very nice. Should like to hear from home now. Hope Emma is getting better fast.

This letter is a curious one, but you must take it for what it is worth.

Yours in haste,

TL

[Card from Cheyenne, Wyoming Territory]
NEAR THE BLACK HILLS.

Have been traveling since 8 o'clock this morning without seeing a tree or bush over one foot high. A dusty desert. The passengers are enjoying themselves looking at prairie dogs, antelopes, and at the stations hunting for moss agates. The prairies were on fire last night. A finer sight I never saw, but called by the settlers "Prairie Demon." Wish you could only see it.

Just went through the first snow shed. Near Pike's Peak. 6040 feet above you—more than a mile!

 $[\mathit{Card}\ \mathit{from}\ \mathit{San}\ \mathit{Francisco},\ \mathit{Cal}.]$

OCTOBER 29, 1875.

Arrived safely—will write soon.

LUTHER.

Santa Rosa, Sonoma County, Cal., Sunday, October 31, 1875.

DEAR MOTHER, SISTER AND NIECE:

Here I am in Santa Rosa, and before I give you a view of this place I will give you a glance at the

journey across lots, but I could write a large volume easier than to give you any clear idea of the many things and scenes that I have seen. We changed cars at Worcester, Utica, Rochester, Suspension Bridge, Detroit, Chicago, Council Bluffs, Omaha, Ogden, Oakland, San Francisco, and Donahue, but after Omaha the changes are so far apart that they are rather pleasant than otherwise, though it would be very hard for a woman if she had any baggage to look after except what she might carry in her hand.

I made but few acquaintances on the cars until I got to Omaha; after that I made some of the best friendships (or acquaintances, as Emma would call them) of my life. Shall always remember with happiness some that I made. On board the cars everyone was contented, pleasant, sociable, and kind, though of course anyone has to look and see who he wishes to associate with. There were several from Massachusetts, New Hampshire, Connecticut, and two from Fitchburg who came all the way. Got acquainted with Judge Miller of Chicago (his son expects to settle in this town), also a wealthy Michigan banker's wife and daughter!!! The journey to Nebraska Center was pleasant. After that it is all desert for more than a thousand miles, and with one exception I saw not a tree the whole 1000 miles. Some of the way, in fact a good share of it, is more sterile than a bare granite rock, with poison water, mines, coal beds, salt, and alum springs and every other nasty chemical. Someone made the remark that they thought it must be the roof of H—. If you saw it you would see the point. Through the desert there is nothing of special interest except inside the cars, and there the dust gathers in drifts, especially in a fellow's nose and throat, which it irritates terribly. Coming through the palisades on the Humboldt River and the Devil's Slide are worth going across the continent to see. Have not space to describe them. They are the only places of special interest on the Central Pacific road.

On the Union Pacific, which commences at Ogden, Utah, there are about 400 miles of desert, then the rest of the way is delightful beyond description. Mountains piled on mountains, snow-clad peaks gilded with sunlight, wild forests, rivers, deep cuts, mammoth trees, leagues of snow-sheds, thousands of geese, ducks, swans, antelopes, etc. I cannot give you any idea of them. Then on the Sierras, when we were winding up the mountainside, could look down thousands of feet onto the lovely Donner, Honey, and Tulare lakes. Then we rushed without steam, except to hold the train back, down the Sierras into the golden land where the old gold washings are. It looks as if there had been two or three earthquakes and a flood or two.

The train stopped a few minutes at "Cape

Horn," where we got out and looked down one-half mile into the valley. After riding a few miles further gardens appeared with olives, oleander, fuchsias, figs; and all kinds of fruit trees and vines are green and thriving. On down into the great Sacramento Valley, where the gardens and front vards are ornamented with palm trees, century plants, fig trees, etc.—it was a rare feast for me. Then on across the valley as level as a floor and as rich as mud to Oakland, which is a beautiful place. At San Francisco I stayed two nights and one and a half days. I cannot describe the joys I felt in looking at the gardens and feeling the healing balmy breezes, but liquor-selling is the great business of that great city. No one who has not seen it can imagine the amount consumed. I used to go nearly one-half mile to get a glass of good water, and I knew of only one or two places where it could be got. I made a vow on my way over that I would not touch a drop of any kind of liquor, and I shall keep it. Of those who do not drink there are a great many, and they are almost without exception the leading and most respected men, and who also own most of the property and do the important business. A young man who will not drink here and is good-natured and makes folks like him, and who minds his own business, has ten thousand chances of success where the same qualities would have one chance in the states.

Now you want to know how Alfred appears to me. His chin whiskers are grown out so he looks some different in that respect. Then he looks more rugged, but is not quite so fleshy as he was a while ago, but is in pretty good condition. The thing that struck me most about him is his great haste to get rich, which thing never bothered him when East. He is in for making money. He is out of a job now and is a little blue—is afraid he cannot get one through the rainy season, which, by the way, is expected every day. He and another fellow have put up an 8 by 10 shanty. I expect to go to keeping house with them tomorrow. We bought crockery, bed ticking, etc., last night. Dave and Lina are coming up after me soon. I shall not look for work for a week. The change of climate has given me a cold, as it does nearly all, but I never felt so contented and free from mental disquiet and never slept or ate better in my life. (There are two fellows in the room talking, so please excuse blunders.) There are some Chinamen in this place. I like them very well. They know about four times as much as folks generally give them credit for. They are disagreeable in some respects.

I want to know how Emma is getting along very much. Expected a letter before this. I agreed to write all about things when I got here, so I began today, and I have given you as good an idea of things as they appeared to me as I can, except a

description of this city, valley, and surroundings, which I will give you on another piece of paper.

Love to all inquiring friends.

FIRST IMPRESSIONS OF CALIFORNIA

"I love sunshine, the blue sky, trees, flowers, mountains, green meadows, sunny brooks, the ocean when its waves softly ripple along the sandy beach or when pounding the rocky cliffs with its thunder and roar, the birds of the field, waterfalls, the rainbow, the dawn, the noonday and the evening sunset—but children above them all."

—Luther Burbank.

ф

[Conclusion of a Letter Written October 31, 1875]
Santa Rosa, Cal.

I firmly believe from what I have seen that it is the chosen spot of all this earth as far as Nature is concerned, and the people are far better than the average Californians in other places. The climate is perfect—all must like it. The air is so sweet that it is a pleasure to drink it in. The sunshine is pure and soft; the mountains which gird the valley are lovely. The valley is covered with majestic oaks placed as no human hand could arrange them for beauty. I cannot describe it! I almost have to cry for joy when I look upon the lovely valley from the hillsides. The gardens are filled with tropical plants, palms, figs, oranges, vines, etc.

Great rose trees climb over the houses, loaded (93)

with every color of blossoms. English ivy fills large trees and flowers are everywhere even now, which is the driest of the dry season. (By the way, it has just begun to rain.) Do you suppose I am not pleased to see fuchsias in the ground in front yards twelve feet high, the trunk ten inches in circumference, and loaded with various colors of blossoms?

Mallows, which there is a little herb, here has a trunk six inches in diameter, eight feet high, as large as a quince bush; chrysanthemums with bushels of great blossoms, rose trees thirty feet high, of all kinds and colors; veronica trees, geranium trees, the birds singing and everything like a beautiful spring day all the time. I can see them all. The sweet gum tree of Australia grows here to be seventy-five feet high in five years. It is a beautiful tree. Honeysuckles, snowberries, etc., grow wild on the mountains. There are so many plants more beautiful that they are neglected.

A family can live here, I am quite sure, for about one-half what they can there and far more comfortably. Meat costs but little, flour is better and cheaper, fruit is nothing, almost, very little fire is needed, and such warm expensive houses are not necessary.

I have written eight big pages and I think I have given you as fair an idea of the place as I can unless I write a book. Everything is changing all

the time here. Have given you a truthful description of my experience so far.

Love to all, Luther.

P. S.—A fog is hardly ever seen here—the wind never blows hard. I wish you could see California fruit. I bought a pear at San Francisco, when I thought I was hungry, for five cents. It was so large that I could only eat two-thirds of it. I threw the rest away. Grapes are so abundant that all are allowed to help themselves to the nicest kinds at the vineyards. There is no skin to them and very small seeds; the pulp is the whole grape. If you try to squeeze one out it will split like a plum. They are very sweet and nice and are so plentiful that they are often used as hog feed.

TATTHER.

SUNDAY AFTERNOON.

It is raining hard. I have nothing special to do, so I write some more and run the risk of having you throw the whole letter away rather than read so much, but you said nobody ever wrote when they got out here, so I will show you that it is not so in every case. The rains come down here very steadily, quietly but fast, with no wind. I am told that is the case always. There is no such disgusting blue feeling when it rains, as there is East. All appear to feel as contented and happy as can be. There is a rosebush in town the trunk of which

is twenty-four inches in circumference, twentyseven feet high, covers nearly a whole house and at some times has several thousand blossoms open at one time.

I send you one of the Santa Rosa papers, which, with my letter, will keep you in reading a week or so. I mean to get a piece of land (hire or buy) and plant some, then I can do other work just the same. There is a petrified forest near here. Mean to see it before I go to work.

There is one thing about the climate which is very peculiar, which is this: anyone can study or write or think with a connected clearness which is delightful. Mental effort is no effort at all. I should rather write a week here than five minutes there. Everybody is agreed to that.

I came across a directory of this county just now. I take a few ideas from it: The cause of the great growth and prosperity of this place just now is the new railroad, which has given it a start. It is the county seat and is called the prettiest town in the state. Is noted for its polite and obliging people and beautiful gardens and lovely surroundings. It is situated in a marvelously fertile valley containing a hundred square miles. The educational advantages are ahead of any California city of its size. (The above is from the directory.) I saw a ten-acre lot of squashes yesterday. The ground seemed almost covered with them, nearly all of

which were as large, yes, larger than any that I ever saw before. They are for cattle feed.

Alfred is a little blue. He is out of work, while all the rest are busy. He just bought twenty dollars worth of tools. He runs a little too much on cheek perhaps, but is liked very much, I guess. I want you should all write. Am in a hurry to hear how Emma is. Suppose I shall hear about Wednesday. Good-bye.

LUTHER.

Santa Rosa, November 9, 1875.

DEAR EMMA:

I received your letter last evening just five minutes after I had put one in the office for home. You asked me one or two questions that I may not have answered. First-I did not take a sleeping car at all, as I got through very well without it. Had the luck to have a whole seat to myself most of the way (which is the way the railroad companies intend should be the case); piled my valise on one end, then my overcoat and blanket over the whole. which made me a nest which was short but quite easy. They run like lightning a part of the way, nights, and sometimes I would wake up and think we were going a little too fast, but would go to sleep immediately. It was quite warm all the way across the "Laramie Plains," which is a part of the great American desert. There it was very cold during the nights, but hot daytimes. I got quite a

cold there one night, which has given me a cough up to the present time, but is fast wearing away. My expenses for coffee, tea, bread, lodging at hotel, and *all* was about \$6 besides fare.

Second—You ask me to write "all the little things that you want to know." Before you get this they will all be answered, I guess. If not, then I shall have to write a book, but if you think of any that I have not answered, let me know and I will answer them. Was very much delighted to see that you were able to write, but I don't hardly believe you were quite able. You must look out for No. 1.

When I eat the luscious fruit here I generally eat about as much more for the folks at home. (I suppose it does me more good than them, though.) But every time I eat any I do wish I could throw a pile of it over into your laps. The Muscat grapes are the best fruit that I ever tasted. Alfred says ditto. They are about the size and shape of plums. We don't stop to peel them. They are the grapes that the best raisins are made of. Families here often dry them. Fruit cans are not for sale here.

I took a long walk today. I found enough new and curious plants in a wild spot of about an acre to set a botanist mad. There is an old surveyor who knows nearly all of the plants here. I am going to take a batch to him this evening. He is very much interested in them. My botany tells the names of only a few California plants. Some of

them have no names. We began our second week's housekeeping today. We reckoned up last night cost per week apiece—a little less than we expected—\$1.94 per week. We ordered today a sack of sweet spuds, one sack of onions, one sack apples, ten pounds oatmeal, some fresh canned salmon, etc., etc.

Give my love to Mother and Lizzie (a share for you) and all who inquire, and tell Mrs. Harrington there is a large field of squashes here in which there are probably five hundred that two men could hardly lift—some of them three and a half feet long by one foot three inches through. Hundreds of them bigger than the biggest ever seen in Lunenburg. I asked Alfred why he didn't write home about the climate, squashes, and big things. He said he dare not. I will run the risk of being called a whopper teller.

Bro. Lute.

Write when you are able. Tell mother and Lizzie to write.

Bunches of grapes half a yard long!!! The white Muscat or Alexandria grape—three and one-half by three and a quarter inches in circumference; if you have a Lunenburg grape to compare, you will observe the difference. Have a job lathing for next week. Have expected Dave every day. I wish you could hear the birds sing.

Will send you a rosebud, but it will freeze on the

way. I will tell next Monday how I like my nursery business.

Write. Lute.

I send you a Chinese receipt for pay for washing. Can you read it? I should like to see the white man that could.

L.

SANTA ROSA, SONOMA COUNTY, November 14, 1875.
(CALIFORNIA.)

DEAR SISTER AND THE REST:

On my way to meeting last evening I stopped at the postoffice and was handed the letter which you wrote to Alfred. I opened it and read it, as we decach other's from home sometimes. Was very glad to hear that all were well and that you were improving. As I have written home a good share of the news here, I take a small sheet to start with this time.

I have expected Dave here every day, as he told Alfred he should come. At any rate have not seen him yet, so I shall go to lathing the "Palace Hotel," the largest building in town. Tomorrow there are quite a number who will lath with me, so that it will probably take only about a week to do it. Since I have been here I have improved all my time in walking in every direction from the city, but have seen no place which Nature has not made perfectly lovely. Thursday I was alone among the hills when a young man overtook me and asked me to ride. In conversation I found he

was Charlie Daman's next neighbor. He has been to school with Myron D. in this city, too. He is a tip-top young man. I shall go to see him when I get time. His father has four thousand acres of land and 2100 sheep, besides other stock—lives seven miles north of here. Friday I went to Bennett Valley, where are huge vineyards and orchards. Saw there a field of cabbages nearly every head of which was as large as a washtub. Saturday I went out with the surveyor, Mr. Spurrier, and examined plants in the gardens here.

The way this place is growing is a marvel to all. Those who have helped build the quick-growing Western cities are as much astonished as anybody. Money, as a general thing, which has been invested in real estate, has doubled once a year and will do so in the future without any doubt. Have not space to tell you why, except climate, soil and position, etc. Where wheat was harvested last June all around the city, now houses stand by hundreds, and all the old Californians and others who have traveled over the state say that Santa Rosa Valley has the most superb climate in the state. I sav all say so. All it has needed before has been a railroad. I have taken special trouble to inquire about the climate here. Have asked many which of the months was the hottest and coldest. Two told me that October was the warmest; one that July was; one that May was; one that January was; and two that July was the coldest, while some say that November is the coldest, others saying it is the hottest (when doctors disagree, etc.), but all agree that no other place has climate like this. For my own comfort it is perfect. We have the loveliest moonlight evenings that I ever saw, and no evening has been cool enough to require anyone to button up his undercoat or warm enough so that it was not comfortable with a coat. At all public places, as well as private houses, the windows and doors are open during the evening. There are no winds here that would blow a fly off his feet, yet there is all the time a little gentle invigorating breeze. From 10 a.m. to 3 p.m. it is guite warm, so warm that anyone at work will perspire just a little during June, July, and August. Some say it is still warmer during the middle of the day, but cooler than now, evenings, though never oppressive either wav.

It is raining today—the fourth day of rain since I arrived. It is very muddy where the streets are not graveled for a short time after a rain. Alfred got two days' work last week. There is not much done here in the winter compared to summer, but everyone keeps busy himself, but does not hire much.

Sunday Evening.

It has cleared off and the larks and robins are singing. Am going to the Baptist meeting this evening.

Santa Rosa, Tuesday, November 30, 1875.

DEAR MOTHER AND EMMA:

I guess you will wonder what I am up to that I do not write. Sunday before last I wrote to you that I expected to go to lathing the next day, but human plans are vain sometimes, especially in this little headstrong city of Santa Rosa.

Well, the building which I was to lath on was not ready and would not be for several days, so I got mad and thought it would be a good time to go and see Dave and George. I started for Tomales two weeks ago this morning and have stayed about there until last night. I had no paper, etc., and not much time to write, so I did not until today, as you see. It is forty days yesterday since I left Lunenburg, and it seems to me as if I had lived a whole lifetime of contentment since those forty days commenced. Why should I not be contented? I have nothing to care for except grub, sleep, and clothing. The first two are plentiful and cheap; of the last but little is needed.

At Dave's I had an outrageous good time, but it would take me three months to write all about it. I went to the ocean, San Rafael, to the neighbors, to a party, to several pleasant rides, sawed wood, milked, looked around the country, and enjoyed myself hugely, and got fat and good natured. Everybody in California has a "happy don't care" look and life here; everything is off-hand and orig-

inal, and I verily believe that I am pretty well Californianized. Folks are, however, sometimes awful blue here, and when they do have them it goes bad. I have seen several newcomers in various stages of the blues, but that disease, the blues, has kept so far from me as the East is from the West or light from darkness. It seems as if I had crawled out of an old dirty dungeon into morning sunshine, but of course that is not all California, but partly circumstances.

You will want to know a hundred questions about Tomales, etc., that I cannot answer unless I spend a few weeks in writing. Dave and George are the best-hearted fellows in the world. George looks ten years younger than I expected. He is a handsome, kind-looking, refined man. He keeps at work all the time. I stayed at George's one-half day and one night and went there a few minutes just before I came away. He has a magnificent house, but has not got it and the surroundings up, and is in haste to finish it before he has to go to Legislature (December 6). Dave took me to the great Pacific Ocean and to Tomales Bay. You bet I was happy as I first saw the great rolling ocean for the first time on this side. Now I have been from ocean to ocean. The dashing of the great billows against the rocks sounds at Dave's, five miles, like heavy thunder or a train of cars. Dave and Lina say it sometimes jars the house so much that they cannot sleep. It kept me awake listening to it, night before last, for a long time. The sound gives anyone the idea of marvelous power and resistless force.

Went to San Rafael. Perhaps you remember the book I had which gave a description of San Rafael. I remember you (mother) said that the description was all a vain show. I thought so too, but the man who wrote it did not tell half its beauties. It makes even Santa Rosa sink a peg. Petaluma is a splendid place to live. Dave and I have been hunting up some small farm near the place for me, either to hire or buy.

The place looks and appears almost exactly like Fitchburg, except, of course, the wonderful climate and soil, etc. Land about that place on which anything in creation can be raised can be got at \$100 an acre. Around Santa Rosa for \$300 an acre. I must say that the climate there is better even than at this place. I have been constantly inquiring about all such things. Tomales climate is delicious in the winter, but rather cold and raw in summer. You and Emma are the only ones that I have written a word to since I left. I think I have done pretty well for you. When I was at Dave's Lina got a letter from you (Emma). When I got home I expected less than a cord of letters from home and was a little disappointed when Alfred said there had been only one, but I found that one a good fat one, and my spirits went up a peg, which was hardly necessary as they are about right here.

I hope you both went to Worcester Thanksgiving. Am glad to hear that you (Emma) are getting along so well and that you (mother) are so comfortable for the winter. You ask about Alfred's shanty. It is only one story high, but we have plenty of room, though there is not enough so that we feel obliged to rent any of it. When I came home last night Alfred said Mr. Walmsley had not cooked anything or done anything during the two weeks that I was gone. Mr. W. told exactly the same story. I believe all that both said and I'll be darned if the shanty didn't look more like a hog's nest than anything I had even seen before, except the real thing. I had a big wash-up this forenoon got dirt enough from the dishes, wiping cloth and towel, etc., to make a good sized ranch. I am in great haste to get something to do that will be permanent. Have done almost nothing yet. Alfred has had a few days' work at odd jobs since I was gone, but says he is completely sick of carpentering. I expect he is going to knocking out paving stones soon. I guess it will be good-paying work, but pretty hard. I shall not take any job of more than a few weeks as I wish to hire a place and "batch it," as they call it here. About a third of the farmers are "bachelors." They live well and comfortably and get rich. I tell you, I know lots

of them worth from twenty-five to seventy-five thousand apiece. I can't think of all the things I did want to write. I was right glad of the letters from home. Was glad that Emma wrote the little things. Sometimes I get more news from some little thing you write than from several big things.

I suppose it is cold and snowy there, but we have not had a *frost* yet. The roses are blooming and budding now, so that it seems as if they would break with their load. The grass is about two inches high. It has rained nearly every day for two weeks, but there have been several most lovely clear days. I think John Woolredge and George Boutwell are foolish to go to Havana, when California climate is so near.

When I went to the bay in Tomales I saw the most lovely rose that I ever saw. It was white, delicately shaded with straw color. The form, color, and fragrance were perfect. Lina got a piece of the bush. It would not live in Massachusetts. Dave's apples are better than peaches; his winter pears are ahead of everything, except Muscat grapes. I should like to talk with you a couple of hours. My tongue can run faster than my pen. You must not expect as long letters as I have written, but I shall write as often. It takes me nearly two and one-half hours to fill one of these sheets with tracks. I believe that this is the twenty-first page I have written to you since I arrived in Santa

Rosa. I want to give you an idea of the place, etc., because I know how I used to want to know about things here before I came. Give my love to all inquirers. Tell Dean C. that I like the place beyond everything that I could possibly think of. Should like to have him come, but don't want to get him away from Mr. Brown. There is very little to do here for a few weeks yet, as the rains stop carpenters, etc., and the farming season does not commence until January.

Here is a little *true* story. Last May a woman bought thirty-six hens. From them she sold a hundred chickens at fifty cents each and seventy-one dozen eggs at about forty cents a dozen, besides what her family used. *All done in five months*; hens left. Poultry is very profitable here, as are also hogs, which are raised mostly on squashes. Write often. I should like to hear twice a week from you.

Santa Rosa, Cal., Sunday, December 5, 1875. Dear Mother and Emma:

The last letter I wrote to you was sent last Tuesday morning. Had just got home from Dave's, but still with no immediate prospect of anything to do. Still thinking that I might find a place to earn my board somewhere, but the abundant rains had put a complete stop to all kinds of work, and after fishing two days like a drowning man for a little piece

of work about this place, I found myself nearly "dead broke" or "strapped," as they call it here. Had nearly made up my mind that there is no place in the great machine that I was fitted for. Thursday morning I decided to make a strike into the country toward Petaluma. After doing up the housework I started (7:30 a.m.). The first ten miles of the way was through adobe land. The mud. or rather mud-slush, was knee deep to a giraffe. As I had no boat with me, I walked on the fences where I could. Stopped at several farm houses to get a chance to work for my grub till the rains were over, but found no such chance to make my fortune, so I trudged on by the roundabout Sebastopol road toward Petaluma, where I arrived at 6 p.m., a little more than nineteen miles. I thought I would sleep in a haystack, but could find none near Petaluma, and had to put up at a hotel. (By the way. I had nothing to eat after breakfast except a very small slice of bread.) The next morning I got up and addressed myself to breakfast. There was such a panic among eatables about that time as I never saw one man produce before. Then for business. There are lots of carriage and cooper shops, etc., there, but I went to W. H. Pepper, proprietor of Petaluma Greenhouses and Nurseries, etc.: told him that I wanted work, what I was good for, etc. He said he had too much help already, and must turn some of them off, but that I might come and bring my trunks and stay with him and he would give me \$50 a month or \$30 and live in his family. I thought that was a pretty good offer to commence on, at least it was a little better than running into debt for grub. I think the work is just what I was got up for. He has large greenhouses, two great nurseries, a fruit farm, and a ranch. Besides, he has two splendid houses in which he lives, sometimes in one, sometimes in the other.

Saw George Burbank in Petaluma a few hours later. He says I am a lucky bugger. Now if I can suit Mr. Pepper and if the job don't fall through before tomorrow morning, and if I can stand the work, and if and if, etc., etc., and I have "struck ile" at last, but things are uncertain in this state. Fortunes made and lost in a day.

The prospects for California next year are very flattering indeed, because of the abundance of rain. There is no fear of drouth next summer. A great many have gone East again during the last two weeks because there is nothing to do here, but still the cars are crowded this way, and next spring there will be abundant work for all who come, and there will be another great demand for "wood butchers" at \$3.50 to \$4 per day. The winter rains here kill work, just as surely as winter snows do there, only it is a little while here.

The farmers keep themselves busy, however, all the time at plowing, digging potatoes, etc. It seems

odd to me to see fields of squashes, potatoes, and garden vegetables still ungathered, but it is just exactly as warm here now as it was in July or at the time I came here. The rains are not disagreeable in the least, except that they stop work. There is not a single house being built in Santa Rosa now, so you may know that somebody has got to be idle after such a rush as there was last summer. Mr. Walmsley is going to leave tomorrow. Alfred is going to board nearer his work. Mr. Haves left some time ago and a new set are going to occupy the shanty (so our home is busted). Alfred's work is hard and not very agreeable, but good wages can be made by one who is strong and used to it. Mr. Gamble told me yesterday that he would give him 10 per cent to solicit orders for groceries for him. (He is the man of whom we get our groceries.) Alfred does not like the proposition. He (Al.) has rented the shanty for four dollars a month, which goes to him and Mr. Walinsley, of course.

Today is the most lovely one. The thermometer is 65 degrees in the shade. I sit here writing with two open windows and a wide-open door: The warm pleasant sunshine pouring in on the floor, birds singing, trees green and fresh, the ground carpeted with long green grass, and castor-oil plants in full bloom around the shanty. The roses have taken a new start since the rain, and instead of having a few stray buds as they do there in June, they are in great *clusters*, twenty to sixty in a

cluster like grapes, besides plenty of blossoms. *I* do wish I could pile a bushel of them in your aprons.

I like Petaluma better even than Santa Rosa. It has a more substantial growth and is prettier? Dave and George say it is a better place to live. Alfred and Mr. Walmsley say so, too (but after my letters from Santa Rosa you may think it impossible). Arthur Barrett has been quite sick; was threatened with a fever. The doctor broke it up. He is very careless—goes about with some old pieces of leather, which he calls boots; never dries himself, and goes about in the rain without coat, etc. He is very nervous—the fleas bother him (they bother us some), but he says California is his home.

I hope you and Emma are comfortable and contented. Thank you both for what you have written. Hope you will write to me, when I get to Petaluma, as often as you can. You may be sure I like to hear the news about my old home. I have written you so much and you have written so little that I hardly know what you want to know most. Went to meeting this forenoon—had a good sermon—house crowded.

Direct my letters, etc., to Petaluma, Sonoma County, Cal. I sent you two papers yesterday. In them is an eucalyptus leaf (the long one). Also sent a rose, some ferns, etc., and a piece of *redwood* leaves—it looks like hemlock.

LUTE.

BEGINNING IN CALIFORNIA

"The guidance of the creative forces is in our hands."

—Luther Burbank.

ф

The Journey to California was made largely from the money secured from the sale of the Burbank potato to J. J. H. Gregory, a successful seedsman of Marblehead, Mass., for the sum of \$150, and Mr. Gregory allowing him to retain ten potatoes with which to get a start in his newly chosen home. These, and little else, except his acquaintance with plant life, were his capital with which to begin his work for the world. "A course in hardship seems always a part of the training for a great work."

Santa Rosa was but a small village surrounded by wheat fields, no orchards or vineyards, and few ornamental trees. There was little employment in winter, except plowing, which was done with gang plows, drawn by teams of oxen or mules, and harvesting crews in summer. As Luther's strength was not equal to these tasks, with little available means, among strangers, he met with hardships suffi-

cient to turn a less-determined soul, and which were intensified no doubt by his extremely sensitive nature. Seeking employment, he accepted work which was far beyond his strength, doing all sorts of odd jobs.

After a time he secured work in the nursery of W. H. Pepper near Petaluma. Here he spent the winter and spring of 1876. However, occupying a room over the steaming greenhouse, and exposed by day to the damp soil and climate, he sickened, and, returning to Santa Rosa, was laid low by fever in the crude bachelor cabin of a workman. But for the kind ministrations of a neighbor woman who, from her cow, furnished him fresh milk, his life might have ended at that time.

Upon his recovery he rented a small piece of land upon which he started a little nursery, working at carpentry during the day and spending the evening with his growing trees and plants. Every cent earned beyond the most necessary expense of living was expended for his chosen enterprise.

In the summer of 1877 his mother came to

California, and, with his sister, joined him in making a home.

Mother purchased a home (at the corner of Tupper and E streets) and four acres of land, a part of which Luther immediately rented and began his nursery. This land he later purchased, building a greenhouse thereon. How tedious and discouraging was the process of establishing a nursery is shown by the following from the old salesbook, which shows the sales for the first year to be but \$15.20 and the next year only about \$70. Yet the writer, who was at the time teaching in the public schools of the county, was enabled to help in a small way, financially, in the start of the business.

The ten precious tubers he had brought across the continent with him had been planted on brother George's place at Tomales; the first season's crop had been saved and replanted, so that the second crop was sufficient in quantity to allow him to offer for sale the Burbank potato, thus helping out his income.

He was also employed by several American and European seed firms as collector of seeds of California's native plants. This gave him a very delightful way to become further acquainted with the trees and plants growing in this state. The knowledge thus gained of the locality, time of blooming and seed ripening, and other particulars, afterwards was of great value in his work. The excursions to the forests and mountains in search of desirable seeds were seasons of joy to him, and no doubt gave him a rest from the routine of business.

Each plant was examined with interest in regard to its tendency to variation, and to the possibility of development and improvement, accurate notes being made of all these points.

Naturally frail and having studied hygiene, also having the New England sense of responsibility, he took every measure to improve his health and to conserve his time and strength, making every *hour* count in something done.

Some amusing incidents occurred because of the resemblance of the two brothers, Luther and Alfred, although they differed in many ways. Alfred, being a joker, enjoyed being taken for his brother.

Once when Luther was called away for the day and Alfred chanced to be at home he asked

Alfred to look after his little nursery and greenhouse. At the time there were a number of fine potted plants for sale.

A lady called to see these plants and Alfred very politely invited her into the greenhouse. Seeing an attractive plant, she asked the name of it, to which Alfred replied "I don't know." Somewhat surprised, she pointed to another and asked its name, receiving the same answer, "I don't know." This was repeated several times, when she turned to him and asked "What do you know?" She received the same reply, "I don't know." "Aren't you Mr. Burbank?" was the next question, and, receiving an affirmative reply, she added, "Mr. Burbank, and don't know your own plants!" "Oh," said Alfred, "these are not my plants; they belong to my brother, who is away today."

It was at this early date that many of his wonderful experiments were begun. At the end of ten years the quality and the reliability of the products of the Santa Rosa Nursery were so well known that the annual sales amounted to over \$16,000.

These were ten happy years, when life was

filled with enthusiasm and hope, with hard toil and many discouragements, and with the vision always before him of "better fruits and fairer flowers."

In 1885 he bought the four acres on Santa Rosa Avenue now known as the Experimental Grounds. The old house there, which was his home for nearly twenty years, still remains (being now used for the storage of seeds). Up to this time (1885) he had lived in his mother's home; now his mother lived in his home.

In 1888, feeling he could now safely launch upon his long-cherished hope to devote himself exclusively to plant experimentation, he sold the nursery business. One year previous to this he had purchased seventeen acres near Sebastopol—the Gold Ridge Farm—for in the extensive experiments more land was required for the testing of the trees and plants, as many of these experiments required many years for completion, and his unvarying rule was never to send out any new production until it was thoroughly tested and proved superior in some particular to anything on the market, and equal in other points, and, so far as possible, exactly what it

was claimed to be. Hence his reputation became established, and if it came from Burbank it could be depended upon.

VISIT TO MASSACHUSETTS IN 1888

PART I

"Man is slowly learning that he, too, may guide the same forces which have been, through all the ages, performing this beneficent work which he sees everywhere above, beneath, and around him in the vast teeming animal and plant life of the world." —Luther Burbank.

ф

After selling the nursery and becoming established in his experimental work, he decided to visit his old Massachusetts home. After the many years of hard work, close attention to business, and exacting occupation of his experiments, this trip was one delightful holiday.

His loyalty to California, however, is shown by the following incident: While attending a town fair in Harvard he was asked by an old friend, "If you had a farm here what would you raise?" After a moment's thought he replied, "I think I would try to raise enough money to get to California."

The following are extracts from his daily letters home to his mother and sister Emma,

who took care of his precious experiment grounds in his absence:

NEAR ALBANY, N. Y.

Safely so far, very sleepy, and sometimes tired. Have been rushed through from Chicago at lightning speed. Shall be glad to get a sleep, bath, and wash. The State of New York is a daisy. Beautiful beyond any other state on the whole route. Fall asters and goldenrods, trees just commencing to turn, pretty towns, and an air of prosperity and thrift. Have got along better than I expected, without taking a sleeping car, by curling up on the seat like a jackknife; have managed to worry through to Ogden. Had bedding furnished since then. Have got a comforter for \$1.50 and that helps out. The last of my California friends left me at Niagara to go other ways.

I am taking care of a Chicago man who lost his sight in the war. He is wealthy and on his way to Saratoga Springs to stay six months. He puts his hands on my shoulder to go everywhere.

Kind wishes to all—45 miles per hour.

LUTE.

FITCHBURG, MASS., September 19, 1888.

Arrived safely at noon—took dinner here. Stage leaves for Lunenburg, six this p.m. Walking up Main Street, met Tom Reynolds, who now lives here with the rest of the folks. We both knew each

other like a flash. He had not changed a mite. They expect me to call on them before I leave. Shall try to. Went to Lyman Albee's store and had two hours' talk with him, and got more news than a horse could draw about everybody from old Levi Farwell down to common folks. Have been into some greenhouses, and am now waiting and resting. Guess you will wish you hadn't asked me to write every day.

6 P. M.

Am contented and have my cup full of happiness. Lyman Albee has taken me all over Fitchburg. Saw Fred Farnsworth (Ben's son) and others that I know, and just now Charlie Longley says "How do you do, Luther." He drives the stage to Lunenburg, which starts in a few minutes. All know me here, and say that I have not changed a bit. I know nearly all the old faces as well as ever. Don't you think I am paid for the weary journey? Good night.

[On a Card of the Lunenburg Farmers' Club] September, 1888.

Spent the forenoon hunting in the woods to get something to send to you. It is clear today—lovely. Will try to put up a box of checkerberry, mayflower, etc. All my time seems to be taken up. Going with Herbert to Fitchburg this p.m. Expect to go to Fitchburg Fair tomorrow or next day and have every minute engaged to go somewhere.

AT HERBERT MEAD'S, September, 1888.

DEAR MOTHER:

After being here so long I at last got a letter from home. Was very glad to know that you were all as well as usual. You cannot imagine the handsqueezings and questions that I was put to for about eight hours. One of my old Lancaster Academy schoolmates (Nellie Day) said she waited hours before she could get an opportunity to speak. Everybody I used to know was just exactly the same friends, and few have changed any. I was one of the four speakers of the day, and, as I was among old friends, appreciated the honor and felt at home. Could not possibly name over all I saw. Lunenburg has not changed, and you cannot possibly imagine the happiness of yesterday. It seems like a dream from which I shall awake and find it a dream.

Every tree, rock, and house looks ten times more homelike than those palms, abalone shells, etc., in your grounds, yet do not think that I could ever stay here. Yet, think what a treat it is to look at the old reservoir toward Lancaster, talk with Kittie Abercrombie, Fannie Graves, John Wooldridge, Milton Fiske, Lottie Hartwell, John Lyons, Annie Page, Fernando Brooks, Arad Wood,

iortie Hastings, Ella Cook, Jessie Sanderson, te., etc.

The old place looks as it did. Mr. Gregory exects to have a monument raised on the spot where he Burbank potato originated, so I pointed it out. Ierbert and I went to the Fitchburg Fair today—net several friends and had some long talks. Everybody thinks I ought to stay with them. Just vent into a store in Fitchburg, and who should vait on me but Anna Marshall, and everywhere am stumbling on familiar faces. You can't imagine now much enjoyment I have had.

Helped to arrange the Fitchburg Hall with flowers and fruits and have made many new friends. John Wooldridge and his folks expect to go to Santa Rosa as soon as they can sell. All send love to you all and Fanny Peabody says she has a kitten for Alfred, but I will be darned if I will carry a circus back. She will have to send it by mail. Suppose you got a box of native plants yesterday. It was pleasant to gather them for you. Milton Fiske says the Mayflowers which are budded may bloom in water. I think not.

Have a box of seeds, stones, etc., to send today. When you get them you may lay them aside until I come.

FITCHBURG, MASS.

DEAR MOTHER:

Your letter received yesterday, and very glad to hear from home and that Jumbo is well. Have met a crowd of friends every day and am too full of

happiness.

I take great long morning and evening walks in the woods and hills and find that the trees can talk plainer even than the folks. All look familiar and I have collected many seeds, etc., some of which I value very much.

About everybody wants to come back with me. Let me know if anything is wanted or if I am seriously needed at home. Give all my friends love and best wishes. Live as comfortably as you can and do not work too hard.

LUTE.

P. S.—Shall hire a team tomorrow and go to Lunenburg and about, to get ferns, seeds, plants, etc., and to bid Lunenburg friends good-bye. Hope to see you all soon, say about November 5 or 6.

CRAWFORD HOUSE, BOSTON, MASS., October 3, 1888. Dear Mother and Sister:

Went from George Ball's this morning to see J. J. H. Gregory at Marblehead; had a good, long talk with him.

Came to Boston at 1 p.m.; went to top of Bunker Hill Monument and saw Wachusett Mountain from it. Calvin and Myra at Lowell have a kind of reunion and I am expected to be there a few hours.

I send some more seeds and that tea today. Please open the box and let the seeds get a little

air and dry out, as they are really too damp to send yet.

Thank you and Emma for letters received last night—sorry poor Jumbo [his pet dog] has the blues. Goodnight.

Boston, October 8, 1888.

DEAR MOTHER AND SISTER:

The Raymond Excursion to Washington goes from here, to be gone nine days—am now on steamer near Long Island Sound. Everything is very pleasant so far, and I have made a few pleasant acquaintances—will write more in the morning.

Today bought a quart box of blueberries and one of huckleberries; both were the last of the season from Nova Scotia. Will have to take them to Washington before I can get out the seed.

We are having charming music on the steamer. Expect to arrive in New York tomorrow morning.

P. S.—October 10.

Arrived in Washington late last evening. Am getting ready to take the excursion drive around the city.

LUTE.

WILLARD'S HOTEL, WASHINGTON, D. C., October 10, 1888.

DEAR MOTHER AND SISTER:

Suppose you got the scribbling I sent this forenoon. Since that we have been on the three hours' drive to places of interest. Saw the original Declaration of Independence, visited the White House, the President's reception room, Weather Bureau, Senate while in session, House of Representatives, Supreme Court (which is trying the Bell Telephone case). Most of the prominent men were pointed out; then through the Capitol greenhouses and grounds, and up to the dome of the Capitol, which is over three hundred feet in height.

It was a glorious autumn day. Could see the Potomac, the President's farm, and the charming, beautiful city of Washington. Saw Butler House Balines, saw the theater where Lincoln was assassinated, and the house opposite, where he died; the depot where Garfield was shot, Washington Monument, United States Fish Commission, Agricultural Department, and Patent Office, and the residences of hundreds of noted men.

Have had no time yet to look into details. Our party of eighty go by steamer to Mount Vernon, then we can spend the rest of the week as we choose. Before coming here I thought I would try to get back before the excursion did, but now I think the time will be too fearfully short.

We are boarding at a "thirty-dollar-a-week" hotel (the noted Willard), \$4.50 per day, and we have every possible attention.

After tomorrow we expect to hasten to see, in detail, the Botanical Gardens, Patent Office, etc., and go up the 500-foot monument.

Have got some very rare seeds already, and shall get more. Went to the postoffice today, but my batch of mail had not arrived yet. Shall expect it tomorrow.

We have all received an invitation, which we shall accept, to the President's reception. As his wife is off visiting, we shall not see her.

Hope all is going well at home; though my time is all taken up to the last minute, yet, I think and wish I could hear. The folks that I am going around with are young Mr. Ward, his wife and mother, of Portsmouth, N. H.; Mr. Mason of Andover, Mass.; Miss Bickford of Boston, and Mr. Hall of Boston. It makes it very pleasant to have pleasant acquaintances. Have bought a fountain pen, so have both ink and bottle now.

At the postoffice. Just got a batch of letters. Have read two of yours. Am afraid that you need me at home, and also that you make too much care of my business. Let it go and take it easy. I see, I think, how things are going. Will read them all over and reply accordingly today.

LATTE.

WILLARD'S HOTEL, WASHINGTON, D. C., October 12, 1888. (Before breakfast.)

DEAR MOTHER:

Thank you for your long kind letters. I think

you are making yourself useless bother about my business. . . .

We went to Mount Vernon, the home of Washington, yesterday. I cannot tell you how many wonderful things I saw there. All the rooms at the great farmhouse are just as he left them; furniture, clothes, dishes, flute, liquor bottles, etc.; trees that he planted, sheds that he built, his letters, etc., in his own handwriting; in short, we seemed to be trespassing in his home. How short a time it seems since this great Republic was born!

Have taken notes of everything each day, and you will hear it all. Have a great quantity of very rare wild and cultivated seeds. Shall go to the Agricultural Department today—forenoon—and to the President's reception this afternoon. Breakfast is waiting.

P. S.—We start back to Boston Monday morning. Enclosed are some leaves from Washington's home place. The cherry tree was not there.

L.

Washington, October 14, 1888.

DEAR EMMA:

Tomorrow we start back to Boston. Have been occupied every minute in collecting seeds and visiting places of interest.

Everyone in the party is delighted with the trip.

Give my love to darling little Jumbo—would like to see the little pet. . . .

Enjoy myself every day, more than I expected to during the whole trip, and now I see that for years I have been overworked and unwell. Do not think I ever got over my hard times of ten or twelve years ago. In haste and half of it forgotten.

Bro. Lute.

Lincoln House, Main Street, Worcester, Mass., October, 1888.

DEAR MOTHER:

Here I am again in Worcester . . .

Have never enjoyed a week of my life better than the last one, and never expect to be happier again. Everything went right. Had a very pleasant social party of people and have made some valued friends, ones who will remember each other as long as life lasts. Sometime, I hope, I shall meet some of them again. The woods and the fields are in charming colors now and if it were not for the ever-present threat of rain, the weather would be perfect. Shall have to start soon as the afternoon will be all too short. Shall await anxiously the mail from home, and can only hope that you are all well. Expect to send another box of seeds, etc., if I can get the time. Take things easy.

P. S.—Have collected oceans of plants and wild seeds, and some little things for you and Emma. Give Jumbo a pat for me.

Lute.

VISIT TO MASSACHUSETTS IN 1888

PART II

"We are now standing just at the gateway of scientific horticulture, only having taken a few steps in the measureless fields which will stretch out as we advance into the golden sunshine of a more complete knowledge of the forces which are to unfold all the graceful forms of garden beauty, and wealth of fruit and flowers, for the comfort and happiness of Earth's teeming millions."

-Luther Burbank.

ф

WILBRAHAM, October 17, 1888.

DEAR MOTHER:

You will see me home from the sixth to the twelfth, probably . . . the main part of my trip seems to be well along. Have enjoyed it beyond words to express, and am healthier, happier, and handsomer than ever you saw me; and if business would live through it, in any way, I would extend my time, for I have got more real happiness out of the last month than for fifteen years. I shall take another trip East some time. Have been in such haste all around that I do not have time to bid anyone good-bye, so escape wholly the pain of parting with kind friends.

Herbert's wife seems to be a rare woman. She sent abundant love to you and all. Called one minute on Laurel Holman's wife and daughter,

also one-half minute on Merrill, your Lunenburg preacher. His brother left him \$40,000, but they have run it through. He still has that "Lily" potato of mine, as he calls it.

In haste,

LUTE.

Lancaster, Mass., October 20, 1888.

DEAR MOTHER AND SISTER:

Arrived here last evening; shall start soon for the old place. Have met Mr. Bartol just now, as spry as a cat and a much finer, smarter, keenerlooking man than I had thought. One of my old schoolmates keeps the "Hotel Lancaster," where I stayed last night and this forenoon. (Powers of Sterling.)

Just saw my old teacher, Miss Anna H. Whitney. She is as smart as a steel trap; is teaching music, painting, carries on a farm, and is raising pet dogs for sale. Took a walk down by the river and through the old cemetery. Was very much interested in the old stones with the dates of 1697, 1698, 1709, 1794, 1706, 1736, 1712, etc., with the old "Ye" instead of "the," etc.

The maple that old Bill (the horse) used to run against "to cut corners" is just the same. The town is the same, and you can perhaps imagine the happy feelings as I walked out around the town hall, the old church, and under the trees where I spent many joyous, youthful days. All is about

the same, but some improved, and what a mixture of feelings came over me as I walked those old homelike places. It seems like living life all over again.

The crows, robins, bluebirds, and bluejays sang to me as I strolled down the side of the Nashua River, on the interval among the hickories, wild grapes, and maples. The bobolinks set up a chatter. It rained hard last night, but threatens to be fair today. Shall take dinner at the hotel, then start afoot to George Willard's, where I agreed to go. Feel sorry that time here is so short and also that you are lonesome during the day. I mailed a pair of slippers today, and some seeds. Am well as possible. Happy the same, fat as can be, contented, hurried, etc. Do not have time to reply to business letters.

Lancaster, Mass., October 20, 1888.

DEAR MOTHER:

Started for George Willard's this noon. Met Warren with a load of apples. He hugged and kissed me, then went along. Saw Ben Farnsworth; he seems quite old. Got to George's about 2:30, then started for Hunting Swamp. Found a little gum, some ferns, etc., and a hemlock tree full of bees (a bee tree). Went from there through the birches to Aaron's Meadow, then the old Switch Road to Pine Hill. Got a lot of low blueberry

plants around the Bolton Cornerstone, where you and I used to get such big fat ones. Got a good many kinds, as I see they vary some. They say there were no blueberries in the state, except at Pine Hill, this year and there were five hundred people at a time picking there. From there I went through the old burned white pine lot to the railroad, down to the old further pasture, to the interval, and to the river, then back to the Cinnamon Roses and the Flag Root, through the woods to Carr's pine hill, then up through Houghton's pine hill, and Nathaniel's piece to the sand bank, then across on the old road to the bridge across the meadow brook (my old dam is still there but much decayed), up on the cranberry patch (all frozen) to the pasture apple tree, which is full; across the brickyards, through Holmes's, up again to the cider mill. Calvin and Levi B. had both called to see me while I was gone. Got back at 5:30. Cold weather, cloudy, and threatens to rain. Am well, hearty, etc.

And my happiness would be complete if you in California could look over the valley with me, but I should never be contented to live here and no sensible Californian would either.

CLINTON, MASS., October 22, 1888.

DEAR MOTHER:

Went to church at Still River yesterday. Saw many more people that I knew than at the Lunen-

burg church. Have taken down all the names and will tell you all about them—Julia Carr, Albert C. and wife, Will C., Mary and daughter, etc. Levi B. has been down three times to see me. He was the same old Levi, full of jokes, but older; is good at figures yet. He and all the others sent abundance of love and good wishes to you all. George Willard's wife took me around by the old schoolhouse, Jim Holman's, etc., this morning and through town to Clinton. Saw Annie and Walter Jackson's father, mother, and sister and Mrs. Stone. They all sent love to you and Emma, and inquired about everybody. Walter was out picking apples.

When I got to Clinton I engaged a photographer to take pictures of the old place, etc., and the monument, for twelve or fourteen dollars, for your benefit there . . .

When I got here at 10 o'clock this forenoon, started out on foot toward Sterling. Went pretty well up toward where grandfather used to live. Got some mackerel stones, seeds, etc., and got back to dinner at 1 p.m. You bet I was hungry! Will start on foot to Lancaster in a few minutes to botanize and observe on the way. I walk very fast and get over a great deal of ground in a day, as I must start home October 29 on the excursion. Expect to find letters from home when I get to Lancaster Center.

FITCHBURG, MASS., October 24, 1888.

DEAR MOTHER AND EMMA:

When I wrote last, was at Clinton ready to start for Lancaster. Walked to Lancaster that afternoon (day before yesterday), stopping by invitation to see Mr. Thayer's greenhouse, etc.

Went to Bolton by the Common vesterday afternoon, then across lots toward Still River, then across the intervals back to town; found some choice plants, lilies, etc., and went by the Great Elm. The photographer came with his team as promised at noon and we went to the top of Ponnikin Hill and photographed the valley, taking in Still River, Pine Hill, etc. If the photograph is good it will be beautiful, as the view is grand. The artist then went home and I stayed at George W.'s; wandered around the old schoolhouse, etc., which was exactly as it used to be (four scholars only) the old maps, stove, seats, desk, and everything just the same. A warm fire was burning in the stove (4:30 p.m.). The pines planted are very large. Those which stood around before have grown but little.

Saw Frank Willard and Johnny Whittemore; both, as do all, send good wishes to all. After supper George and wife and Mabel Jackson (Annie's sister) went to a torchlight and political speaking in the old town hall. There met many acquaintances and friends and enjoyed it very much.

Am enjoying myself and getting happiness and health together. Took a fifteen-mile walk today in the rain, looking for plants; enjoyed every step and enjoy every day of this rest more than a lifetime of business worry such as I have seen.

I have made arrangements to start October 29 by the last excursion and shall come right through without a (voluntary) stop. Inclosed you will find a description of the excursion.

Emma's good long letter received, with many thanks; also a lot of others. Am sorry that you (Emma) and mother have so much of my business to look after. I will soon be there to relieve you. Glad Jumbo is well, too.

LUTE.

FITCHBURG, MASS., October 26, 1888.

DEAR MOTHER:

Received a nice long letter from Emma. Glad to know that you are better. Was bothering some about things at home. But before you get this I will be about half way home again. Am enjoying myself as well as any living being can. Have been all day gathering and putting up plants and seeds and writing, etc., but do not have time to answer any of the business letters that have been sent to me. Went to Lunenburg yesterday. Stayed all day. Don't worry and bother yourself.

LUTE.

FITCHBURG, MASS., October 26, 1888.

DEAR EMMA:

Your very kind and welcome letter just received. Glad to know that things are going as well as they are. I have no time even to reply to any of the business letters which have been sent to me. Everybody thinks it a shame that I cannot stay longer, but by the time you get this I shall be about half way home again.

I send some plants; you may leave them done up in the package just as they come. Put them in a cool, damp place; lay a wet sack or something over them, or a box, and I will attend to them.

Went to Lunenburg and spent the day and evening as follows: Called at postoffice, John Brown's, Dean's, Fannie Graves's, Jim Harrington's; dinner at H. Mead's, then went with him hunting plants, etc., and to Malan Heath's, Jim Snow's, Emma Hastings's; then back to Herbert's, leaving him home; then to Fannie Graves's to supper, then to Estabrook's, and home late in the evening, 9 p.m. Had a glorious time!

The day was the first clear, fair, perfect one in New England since arrival. The Lunenburg friends thought I had returned to California and Fannie was making a handkerchief to send me, a yard square, to cry in because I didn't see them again. Could take back a couple of carloads of friends, but I think it best to look up places for them first.

Some are coming this winter, anyway, on their own risk.

Have been out in the woods all the forenoon. Found many rare trees and bulbs. Seemed like an angelic dream. Was happy as mortal can be, free from care, fat, hungry, healthy, and singing like a crow. All the afternoon putting up seeds, and writing. Annie Kilborn has invited me to spend the evening with her. Their place is right near—shall go—and to May's tomorrow afternoon and evening. Saw Anna Marshall and half a dozen lately made acquaintances last evening and today. Fair today, but threatening rain.

BROTHER LUTTE.

AYER (formerly Groton) JUNCTION, October 27, 1888.

DEAR MOTHER:

Just arrived from Fitchburg, where I spent a very happy week, and am all the time overjoyed. There was a heavy frost this morning. The maples are beautiful. The Baldwin apple trees hang loaded to the ground. The plow shop here burned down several years ago. The "Acre" looks just the same. Am going around today, then to Warnerville tomorrow. I send some seeds and views of Fitchburg. Spent the forenoon yesterday at Mr. Goodwin's; Hattie leaves for California November 6 to meet a new husband; the rest of the family expect to go in the spring. Have been to May's every

afternoon and evening. They have done all on earth that could be done to make it pleasant for me. Mrs. Cushing and Sarah C. are stopping there just now. All send love to you and Emma. Annie Kilborn is living in Fitchburg—did not see her this time. You may open the box of seeds and let them dry out some.

In haste,

Warnerville, Mass., October 28, 1888.

DEAR MOTHER:

Came here last evening; went through the prison today; shall make a new start tomorrow for Newtonville or Boston or Marblehead. All are well here. Found many friends at Ayer-Mr. Lawton, Mary and Ed, Doctor Willis, Mr. Swett, Wright and sons, Felch, etc., yet fewer than anywhere else. On arriving at Aver it looked like rain, so I scrabbled up the railroad three or four miles to Groton Center, then back all the way through the woods, coming out near the old pond and house by the chair shop. Got lots of evergreens, etc., as you will see by the box which I sent today. It wet me and feet some, but I was so full of enthusiasm that wet or cold could have no effect. A poor widow with eight children lives on the old place. She had three barrels of crabapples on that tree in front of the house, and she says she raised four barrels of potatoes in the garden.

The forest has grown up with oaks and some pines between there and the railroad; got two of the crabapples and a poplar leaf for you, which I will send as soon as possible. The place looks just as it used to, only a little more used up; the rooms are the same. The hill back has been badly taken down for gravel. The lilac, elms, snowflake, etc., still remain. Chair shop is running. Before noon I had taken another walk up on the hill northeast of town, which has grown less than any part yet seen.

Enjoyed myself beyond measure, but it poured in the afternoon, so I could not go for any of Sam Reed's rare ferns, yet hope to before I go back to California. Am in ecstasies when in the woods and swamps. This place is more settled and do not enjoy myself as well. George is going with me to Concord this afternoon. I forgot to tell Emma that the maple leaves in the box were sent by Sarah Cushing to her with many kind wishes.

May sends oceans of love to you and Emma. It rained all night, but looks like clearing up now. Talk about California rainy season — Massachusetts can get up more thundering disagreeable weather than ever I supposed. It squalled snow Saturday and Sunday. That and the frost I enjoyed, but do not care for wet feet and back all the time.

Bought an umbrella at Fitchburg and left it be-

cause it threatened to be fair, but shall need it here, and shall probably have to buy a suit of oil clothes, rubber boots, and a boat, and some lightning rods, etc. The maples are beautiful. Jennie says send you and Emma her love, and wishes you could come over. The heavy frosts of the last few days have killed all the tender plants. I sent in Lawler's circular a leaf from the poplar and one of the crabapples; leaves from the Ayer place.

LUTE.

P. S.—Have got early amber and sage grape cuttings, various apple grafts, etc., from the old place.

AMERICAN HOTEL, FITCHBURG, MASS., October 28, 1888.

DEAR MOTHER AND EMMA:

Have just finished packing for Santa Rosa. Start early in the morning for Boston to get a good seat, etc., it costs no more. Shall buy a few provisions and basket to carry them in. May did not like it because I would not let her furnish the grub for the journey. Was there yesterday afternoon and evening and today. Called on Annie Lovering evening before last. She has been very sick—last spring—and I think she will never be well again. Called also on Mr. Goodwin's folks. Hattie feels very bad because I cannot wait until the eighth and go with them. Everybody would go to California

if they could, and I don't much blame them if this has been a fair sample of weather. Rained last night, stopped today, and is now raining again like blazes.

Am enjoying every moment and if business was not calling so loud would stay longer. Bought a good woolen blanket yesterday for \$4.80. After buying my ticket I shall have \$350 to bring home with me, so you will see that I have not been extravagant, and have bought several dollars' worth of useful articles to take back besides. Hoping to find you all well, and expecting to see you all, Jumbo too.

Good night,

LIFE IN THE VINE-COVERED COTTAGE

"The vast possibilities of plant-breeding can hardly be estimated. These vast possibilities are not alone for one year, or for our own time or race, but are beneficent legacies for every man, woman, and child who shall ever inhabit the earth."

—Luther Burbank.

ф

No MAN EVER gave himself more completely and enthusiastically to his task in life than did Luther Burbank to the work of plant improvement in the years that followed.

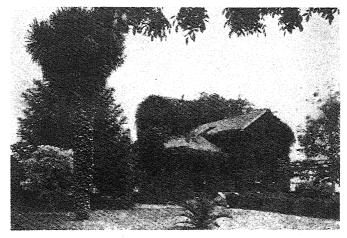
With infinite patience and tireless energy he toiled eagerly on. Seeds were planted in countless thousands, the tender plants transplanted by deft fingers into boxes, and later into the open ground. Many of these seeds had been selected from previous experiments; others were from foreign collectors in many lands—from Australia, South America, and the mountains of Central China. He tells us that whenever a new plant of a certain species was needed for combining with one already growing on the grounds, it was sure to come from some remote

place, sent by a collector unknown to him, but apparently possessed of a subtle intuition. This occurred so many times that it ceased to cause comment or even surprise. The work of caring for these—to him, and to the world—precious plants was a gigantic task, requiring the careful attention of each employee, and more especially of the master of the work.

Two or three times each week a day must be spent at Sebastopol. These were wearisome days, especially during the fruit season. He would pass rapidly up and down the long rows of trees and plants, giving attention to each individual plant, commending or rejecting it.

Often in passing a plant, in which a certain quality attracted his interest, he would stop to tie a white string—a badge of honor—around the stem, to indicate that he wished to become better acquainted with it; or if some undesirable trait had developed, he indicated the plant's destruction; all this was rapidly accomplished.

Jumbo was his companion, passing up and down the field with his master all the long day. "Black Belle," the beautiful horse that he



The Vine-Covered Cottage.

drove to and from the farm, a distance of eight miles, was also a pet, as he was very fond of animals. After giving instructions to the men in their work, he drove back to his home, weary in body as well as in mind.

A barn had been built, not alone for the comfort of "Black Belle," but for the storing of material used in the packing and shipping of trees and plants. A greenhouse had also been found to be required.

The following letter to the sister, written by

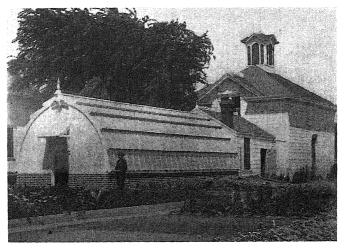
an employee, gives a glimpse of life in the vinecovered cottage:

DEAR FRIEND:

This has been a busy week at the Burbank establishment. First, we began the week—Sunday—with company; only three came before breakfast, but they kept coming.

Monday Mr. Burbank prepared for a trip to the city. That means hybridize everything ready, select and mark everything, lay out work for Tom, write letters and look over desk, make memoranda of things to do by the yard and then do them; go to Sebastopol and see about things there, etc., and always something extra comes up unexpectedly to add to the variety.

He got off on Tuesday, 8 a.m. train. He went to attend the meeting of the Board of Trade, as they had elected him an honorary member last year and had kept sending invitations to attend their meetings. They gave him an ovation, and he had to make a speech, which is perhaps the shortest and the best ever delivered before an American audience. I will type it for you: "Ladies and Gentlemen: Everything in life has its abilities and limitations. I can make new fruits and flowers for you, but I cannot make you a speech." They were pleased and made arrangements for a special Bur-



Burbank Among the Flowers by the Greenhouse.

bank Exhibit. (Will send a man up when fruit is ripe to get samples, etc. More work.)

When he got home Tuesday night, more letters. The Eastern seed houses are clamoring for prices for their next year's catalogues, so that must be looked up and a seed list and a bulb list made out. They also sent in big orders, which must be booked for next fall and acknowledged. Also orders from England, Scotland, and South Africa, which must have special care in packing; and all was done.

Then came a swarm of university graduates for recommendation and a job. They all want work, and it seems as if they all come here. Well-worded recommendations were written for the young women and men; letters were written to the graduates of Eastern universities, turning their applications over to the Board of Trade of Sonoma County to answer their questions.

More company, and still more company! Then the photographer must be taken to Gold Ridge to take photographs of things there. Then essays; he wrote one and got it off early in the week and now is engaged on another for the Plant Breeders' conference to be held in New York. Just as he gets all his notes spread out and going smoothly, here is an interruption—the man to cut the hay, another one comes to show him a rare (?) flower that has appeared in his garden, thinking, because he had never seen it before, that Burbank will be surprised to see it. Then he must tell him what it is, all about it, and how to grow it, etc. Then back again to the essay—another interruption, the mother wants to see him; no one else will do; and so it goes.

The desks look like a cyclone had struck them—notes and scraps, partly finished letters, seed lists and memoranda, all in a jumble. Yet there are pleasant things sandwiched in. He has sold his Early Burbank Cherry up to Vacaville for \$400. This will save him the trouble of introducing it himself.

The people of Lunenburg have sent a cordial in-

vitation to "their most distinguished citizen" to attend a reunion there in July. It is pleasant to know they appreciate him, for you know "The prophet is not without honor save in his own country"; when it reaches there the world is conquered.

Your brother brought home, from Gold Ridge, Shasta daisies by the tubful to treat his friends. Tom has been digging bulbs all the week, and seed gathering has begun in earnest. We have painted signs so no one will stroll around collecting the fine hybridized seeds before we have a chance at them.

As to your brother—well, he is tired out again, and is going away this afternoon to stay until Monday. He has not made up his mind where yet, but he simply will not rest here. Anyone who rings can have a chance at him. You can't save him, for he won't be saved. He is too patient and lets his admirers wear him out, when many of them would cry if they knew it.

M.

These were foundation years, when experiments were inaugurated which later placed the horticultural and scientific world under tribute. As a result of these experiments becoming known, men of science began to make pilgrimages to this humble home in Santa Rosa.

Life was very simple in the vine-covered cottage. Early rising, a full day's work on the grounds or in the office, simple meals, and early retiring to rest. Yet there was always an hour or two of relaxation in the evening; while my brother rested on the couch, some member of the household read aloud the latest books—science, poetry, or fiction—all listening with delight to his comments. Often some young lady of his acquaintance came in to play the piano or sing.

A source of joy to him was the song, each evening, of a song thrush (a bird he loved in his boyhood) that had come to live near the home. He was often amused and rested by the antics of a pet dog, "Jumbo," a tiny Japanese dog which was his almost constant companion for many years.

These were lonesome years. The sister had married, and, while living near and spending much time with him, had other interests. The mother, although intensely interested in her son's work, was failing with the weight of years and was now a care, and he must depend on hired help to make the home comfortable. He had neither the time nor inclination for society.

At this time some of the radical religionists

ÚNIVERSAL LIBRARY

